

The Tyranny of Timespace

*Examining the timetable of schooling activities
as the interface between policy and everyday rhythms.*

Sara Muller

A dissertation submitted in fulfilment of the requirements for the award of the degree of
Doctorate in Education.

Supervisor: Dr. Heather Jacklin

Student number: BLKSAR001

School of Education
Faculty of Humanities
University of Cape Town

Declaration:

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and been cited and referenced.

Signature:

Signed by candidate

Date: 10 April 2020

This work has been completed with the generous support of the Canon Collins Education and Legal Assistance Trust, the National Institute for Humanities and Social Sciences SAHUDA scholarship, and University of Cape Town postgraduate funding. All opinions expressed herein are the author's own and not those of the organisations that supported this work.

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

Abstract

This thesis seeks to understand the role of school timetables as an interface between policies that regulate or distribute forms of capital to schools, and their teaching and learning rhythms. By doing so, it proposes a mechanism for examining the reproduction of schooling practices, and how these are grounded in policy-regulated materiality.

Two high schools with similar historic backgrounds, and operating under the same provincial government, were selected and closely studied for evidence of rhythms of practice and the correspondence of these rhythms to each school's timetable. The two schools now experience different access to resources, and have significant differences in teaching and learning rhythms, as well as school-leaving summative assessment results.

The study develops an analytic framework for identifying policies that *reach* into schools through the timetable. Five key inputs are identified as necessary for constructing timetables, providing productive lines of inquiry as to which policies affect schooling rhythms and how. By asking who teaches whom, what, with what and where, systematic analysis is conducted on: how schools are staffed (who); who they enrol (whom); their interpretation of curriculum (what); what supplementary resources they can command (with what); and their infrastructural facilities and geographic (dis)advantages (where).

The interaction between these different threads is examined as they tangle within each school's timetable. The enactment of the policies regulating each thread is then traced through the layers of governance of the South African education system: national, provincial and local (school-level).

Timetables are conceptualised in this study as local representations of intended teaching and learning rhythm. Using Lefebvre's triad of timespace-conceived, timespace-perceived and timespace-lived, timetables (timespace-conceived) are brought into conversation with timespace-lived through daily teaching and learning activities. Bourdieu's theory of practice is used with Lefebvre to animate the 'game' of schooling: what schools strive for, what forms of capital they can command to sustain or improve their field position, and how they reproduce their practices. Bourdieu and Lefebvre together generate a socio-material practice theory lens that foregrounds timetables and their legitimacy to govern rhythms of teaching and learning in timespace.

Timetables emerge as a site of the production and reproduction of advantage (fortified schools) and/or disadvantage (exposed schools) in the game of schooling. In timetables, the policies that avail forms of capital interact in previously unconsidered ways, suggesting that collectively they potentially undergird inequality in the education system.

Contents

Abstract	ii
Contents	iii
List of Figures and Tables.....	vii
Keywords	viii
Conventions	viii
Acronyms and abbreviations.....	ix
1. Introduction	1
1.1 Study overview	1
1.2 Schooling inequalities and inadequacies in South Africa.....	3
1.3 Exposed and fortified: capturing complex (dis)advantage	5
1.4 Rationale.....	6
1.4.1 Meaningful opportunities and conditions for change—time, space and rhythm	6
1.5 Connecting policy to everyday reality: the timetable	7
1.6 Research questions.....	9
1.7 Thesis outline	9
2. Conceptual framework	11
2.1 Introduction.....	11
2.2 Bourdieu	11
2.2.1 Field.....	12
2.2.2 Forms of capital	16
2.2.3 Habitus.....	19
2.2.4 Critiques of Bourdieu	21
2.2.5 Bourdieu and policy.....	23
2.2.6 Bourdieu and timespace	24
2.3 Lefebvre.....	27
2.3.1 Timespace	27
2.3.2 Different types of timespace.....	28
2.3.3 Rhythm	31
2.4 Rhythm and non-determined regularity: a common motif.....	34
2.4.1 A word on reach	35
2.5 Conclusion.....	36
3. Literature review.....	37
3.1 Introduction.....	37
3.2 Debates on South African education inequality outside of timespace: contesting theories of change.....	37
3.3 Schools and timespace.....	39

3.3.1	Space in schools	40
3.3.2	Time in schools.....	42
3.3.3	South African research on time and space in schools	47
3.4	Rhythms in schools.....	51
3.4.1	South African research on rhythms	52
3.5	Timetables.....	53
3.6	Conclusion.....	56
4.	Methodology and analytical framework.....	57
4.1	Introduction.....	57
4.2	The design process and how the analysis is sequenced.....	58
4.2.1	Developing a framework to study timetables	58
4.2.2	Sequencing of analysis	58
4.3	Timetables: what and how data was produced	61
4.3.1	What was examined: identifying data from timetables	61
4.3.2	How timetables were analysed: the data production process	72
4.4	Policy roots of timetables	74
4.4.1	What was examined: identifying policies for analysis	74
4.4.2	How policies were analysed	84
4.5	Everyday rhythms	84
4.5.1	What was examined: school rhythms and timespace-lived	84
4.5.2	How rhythm was analysed	88
4.6	Relating data to the research questions.....	90
4.7	School site selection and rationale	91
4.7.1	Choosing secondary schools	91
4.7.2	Choosing mixed gender schools	92
4.7.3	Choosing schools with fee charging capability	92
4.7.4	Choosing schools with similar forms of inherited infrastructure	92
4.7.5	A telling rather than a typical case	93
4.7.6	Working in the Western Cape	93
4.8	Data collection: design considerations and challenges	94
4.8.1	Fieldwork schedule.....	94
4.8.2	Data collection challenges	95
4.8.3	Validity and validity threats: how credible are the accounts given?.....	97
4.8.4	Ethics	102
4.9	Conclusion.....	103

5.	Timetables and their qualities	104
5.1	Introduction.....	104
5.2	School A.....	105
5.2.1	School A's timetable.....	105
5.2.2	Forms of capital shaping School A's timetable.....	111
5.2.3	School A's field position and evidence of this in the timetable	127
5.3	School B.....	128
5.3.1	School B's timetable.....	128
5.3.2	Forms of capital shaping School B's timetable.....	135
5.4	Similarities and differences: how the timetables compared	151
5.4.1	Consensus and conflict over the timetable	154
5.5	Conclusion.....	156
6.	Policies undergirding timetables	157
6.1	Introduction.....	157
6.1.1	Policy tracts under consideration.....	158
6.2	With what: public and private funding.....	159
6.2.1	The NNSSF.....	159
6.2.2	School take up of the NNSSF.....	170
6.3	Who: teachers and other staff.....	172
6.3.1	The PAM and the PPN	173
6.3.2	Who tangles with with what: SGB staff	180
6.3.3	Schools' take up of the PAM and the PPN	182
6.4	Whom: student admissions.....	184
6.4.1	The APOPS.....	184
6.4.2	Whom influences with what: fee exemptions	190
6.4.3	Schools' enactment of the APOPS	191
6.5	What: curriculum	193
6.5.1	The NPPPR	193
6.5.2	What tangles with whom: languages	198
6.5.3	Schools' take up of the NPPPR	199
6.6	Where: school location and infrastructure.....	204
6.6.1	The Minimum Norms and Standards for School Infrastructure.....	204
6.6.2	Where affects whom and with what: feeder zones.....	205
6.7	Conclusion.....	206

7.	Everyday rhythms and the timetable's hold on them	207
7.1	Introduction	207
7.2	School A	208
7.2.1	Rhythm intended and rhythm enacted: timetable adherence	208
7.2.2	Rhythms of discipline and dressage	214
7.2.3	Infrastructure conditions: material meets social space	221
7.2.4	Timespace-perceived: subjective experiences of teachers and students ..	228
7.2.5	Fortified or exposed? Repetition and difference	232
7.3	School B	234
7.3.1	Rhythm intended and rhythm enacted: timetable adherence	234
7.3.2	Rhythms of discipline and dressage	241
7.3.3	Infrastructure conditions: material meets social space	251
7.3.4	Timespace-perceived: subjective experiences of teachers and students ..	257
7.3.5	Fortified or exposed? Repetition and difference	264
7.4	Similarities and differences: how the schools' rhythms compared	265
7.4.1	Rhythm intended vs. rhythm enacted	265
7.4.2	Relating rhythms to results	267
7.5	Conclusion	269
8.	Summary and discussion: reproducing rhythms	270
8.1	Introduction	270
8.2	Pulling through the threads	272
8.2.1	Who	272
8.2.2	Whom	273
8.2.3	What	275
8.2.4	With what	278
8.2.5	Where	281
8.3	Producing and reproducing rhythms	282
8.3.1	Elasticity as the shock-absorber protecting rhythm	283
8.3.2	Complexifying exposedness: elasticity to different ends	284
8.4	A rhythmic theory of change	284
8.4.1	Changing rhythms requires changing all three components of practice...	285
8.4.2	What should change: a normative question	287
8.5	Conclusion	288
9.	References	i
10.	Appendices	xiii

List of Figures and Tables

Figure 4.1 Sequencing of analysis layers by influence	58
Figure 4.2 Policies influence timetables by availing different variations of forms of capital	59
Figure 4.3 How the layers of analysis correspond to Lefebvre's triad of timespace	60
Figure 4.4 Input parameters required for the activity of timetabling	62
Figure 4.5 Interactions of input parameters required for the activity of timetabling.....	71
Figure 4.6 Policies informing availability of capitals (regulated or distributed) for each timetable input.....	75
Figure 4.7 A model of reach: policy strands of capital regulation/distribution and their layers of enactment	76
Figure 4.8 Cumulative observation hours at each school as distributed throughout the school day	94
Figure 5.1 Years of service at School A: contrasting past and present staff.....	113
Figure 5.2 Lesson load distribution of post level 1 staff at School A and School B.	152
Figure 8.1 Reproducing fortification: cycles of capital accumulation.	282
Figure 8.2 Reproducing exposedness: cycles of precarity.	283
Table 4.1 Key inputs for constructing school timetables.	61
Table 4.2 Rationale for interviews conducted to examine schools' timetables.	73
Table 4.3 Relating data types to research questions and concepts of the study.	90
Table 5.1 Lengths of lessons (in minutes) of School B's timetable.	128
Table 5.2 Staff (in)elasticities available for constructing a substitution schedule.	134
Table 5.3 Quantities of key inputs for timetabling across both schools	151
Table 5.4 Similarities and differences between the schools in timetable qualities.	153
Table 5.5 Exam enrolment per subject for NSC across both schools.	155
Table 6.1 Policy extracts shaping forms of capital for timetabling	158
Table 6.2 Per student allocation for non-personnel expenditure 2016-2019.	160
Table 6.3 Households qualifying for total or partial exemption from school fees.	165
Table 6.4 Dates of publication of amended NNSSF data, 2007—2019.....	168
Table 6.5 Differences in staffing at School A and School B (from Table 5.3).	172
Table 6.6 Teacher ratios and relative lesson loads according to the PAM.....	174
Table 6.7 Ideal class sizes, teacher lesson loads & contact hours for FET subjects.	175
Table 6.8 Teacher's weekly time distribution based on the PPN and PAM	178
Table 6.9 Teacher's weekly time distribution with 25% overtime.	179
Table 6.10 Teacher's weekly time distribution with 25% increase in P1 staff.	181

Table 6.11 Teacher's weekly time distribution with 50% increase in P1 staff.	182
Table 6.12 Variations in application windows by province.	187
Table 6.13 Percent of students who have passed Grade 9 by the time they reach the calendar year in which they turn 17.	188
Table 6.14 Deadlines for enrolling students for 2018 in the Western Cape.	189
Table 6.15 Mandatory subjects in Grades 8 and 9 in all schools.	194
Table 6.16 Subject time allocation in the FET Phase according to the NPPPR.	196
Table 6.17 Allocation of time to subjects across both schools in the Senior Phase.	201
Table 7.1 Detention structure at School B	247
Table 7.2 Percent students registered for NSC exams in both schools 2016 and 2017.	267
Table 7.3 Pass rates (40% < achievement) for both schools in 2016 and 2017.	268
Table 8.1 How School A and B's economic capital compares to other ordinary public schools in the South African basic education system.	279

Keywords

Timetable; rhythm; school timespace; education policies; forms of capital; timespace-conceived; timespace-lived; fortified and exposed; reproduction.

Conventions

A note for the reader regarding conventions used in this thesis.

- The five stranded model used throughout the thesis uses common question words in a nominal manner. These five strands are underlined to indicate use in this manner, as distinguished from ordinary use. Where the reference is to another section of the thesis by way of a sub-header, this is indicated in quotations.
- Recognising the politically loaded use of the terms that refer to apartheid era racial categories, these categories are used insofar as they are relevant to how schooling inequalities were designed by the apartheid government and that those inequalities persist. The terms White and Black are used to indicate these racial categories, "Black" being broadly defined unless otherwise specified. The term 'Coloured', used to refer to people of mixed racial heritage, is placed in scare-quotes as it is more contentious and also does not transfer with the same meaning it holds in South Africa to other contexts e.g. the United States.

Acronyms and abbreviations

APOPS	Admissions Policy for Ordinary Public Schools
CAPS	Curriculum and Assessment Policy Statement
CEMIS	Central Education Management Information System
DBE	Department of Basic Education (national department)
EE	Equal Education (activist NGO)
EMS	Economic and Management Sciences (Senior Phase subject)
FAL	First Additional Language
FET	Further Education and Training Phase (Grades 10-12)
GET	General Education and Training Phase (Grades R-9)
GPS	Global Positioning System
HL	Home Language
HoD	Head of Department (middle management of a school)
IT	Information Technology (an elective subject in the FET Phase)
LO	Life Orientation (a mandatory subject in all phases)
LTSM	Learning and Teaching Support Materials
MNSSI	Minimum Norms and Standards for School Infrastructure
NEPA	National Education Policy Act
NGO	Non-government organisation
NNSSF	National Norms and Standards for School Funding
NPPPR	National Policy for Promotion and Progression Requirements
NSC	National Senior Certificate (school leaving examinations in Grade 12)
OTL	Opportunity to learn
P(x)	Post level "x" (teacher rank in school)
PAM	Personnel Administrative Measures
PED	Provincial Education Department
PPN	Post Provisioning Norms
Q(x)	Quintile "x" (a school's official wealth bracket)
SAL	Second Additional Language
SAMI	Schools Admissions Management Information system
SASA	South African Schools Act
SBA	School-based assessment
SEN	Special Education Needs
SES	Socio-economic status
SGB	School Governing Body
SMS	Short messaging service
STEM	Science Technology Engineering and Mathematics
WCED	Western Cape Education Department

For, and with, Heather.

A luta ...

1.

Introduction

1.1 Study overview

Formalized schooling with a standardized curriculum cannot happen in the absence of a school timetable. One of the first organizational tasks of each academic year is the configuration of a viable timetable and the distribution of this artefact to all staff and students prior to lessons commencing. How tightly or loosely a school's timetable regulates the movement and activities of teachers and students varies broadly, but the presence of a timetable at all is a necessary prerequisite for teaching and learning to happen across a school.

The purpose of this study is to explore the connections between rhythms of teaching and learning in secondary schools, and key policies which regulate or distribute the resources required to establish those rhythms. School timetables are posited as the intermediary artefact which regulates—with varying influence—the rhythmic practices of schools in time and space.

How rhythms distinguish schools that consistently produce high summative assessment results from those which do not is a focus of interest, as are how the policies identified shape and constrain timetable configurations in ways that produce and reproduce said rhythms in context. Such policy-shaped differences, and their implications for schooling equity and quality, are salient for South African ordinary public schools in general.

Two sets of theoretical tools are drawn upon to consider 'resources' in schooling practice, using the timetable as a lens. Pierre Bourdieu's practice theory is deployed to consider mechanisms of social dominance and its reproduction, and how what constitutes a 'resource' is contextual and contingent on the field of practice. The work of Henri Lefebvre is then used to conceptualise social time, space and rhythm, and bring tempo-spatial materiality into view.

These interests originated from personal experience working as a teacher responsible for the timetable in a no-fee ordinary public secondary school in South Africa. This experience foregrounded the complexities inherent in organising activities in (limited) time and (limited) space with the resources at hand, and the (in)adequacy of these arrangements in the context of a school serving a precarious urban community. The effect of contextual factors on what time is used for—and what it means—is elaborated in the study.

Two schools are examined to contrast the effects of differentiated resource access on timetable design and rhythms of teaching and learning. Analysis begins by examining the timetable as the primary tempo-setting, space-arranging artefact for a school. It then considers what key inputs are required for the construction of the timetable, and traces the origins of these inputs and their differentiated availability in each school back to policy. Finally, the contextual enactment of the timetable in each school, and that artefact's authority to regulate rhythm, is discussed.

The two schools examined had diverging assessment results. As discussed in more depth in Chapter Four, these schools share similar historical origins, but now occupy vastly different positions on the competitive terrain of South Africa's marketized schooling system. The generative factors behind their divergence is thus rooted in the current policy landscape. School selection for the study required choosing sites with sufficient similarities as to make their practices comparable, so that a plausible relation could be forged between the schools' different access to material and embodied resources, their different rhythms of teaching and learning, and the roots of these differences in current policies that reach.

The study is primarily concerned with deep inequality (and in/adequacy of state provision) in South African education, and how productive new theories of change might be devised to address this. The remainder of the chapter contextualises the study, outlining the rationale for the research and the approach employed. A brief summary of South Africa's existing school inequality is provided, after which a nomenclature is developed to describe the multiple facets of difference between schools, loosely drawing on Teese and Polesel's (2003) terms 'fortified' and 'exposed'. Five threads of connection between policies and schools are suggested to guide analysis forward. Finally, the three research questions for the thesis are clarified.

1.2 Schooling inequalities and inadequacies in South Africa

Meaningful teaching and learning is—on the whole—not accessible to the vast majority of school-going children in South Africa, with a deeply bifurcated public system producing results only for a small minority who attend elite schools heavily subsidised by school fees (Christie, 2008). The origins of this inequality date back to colonial times (Hlwatshayo, 2000; Chisholm, 2012), with differences subsequently amplified and reified during apartheid (Christie, 2008), primarily based on race.

Deep inequality now characterizes schooling in post-apartheid South Africa, and is well documented (Manganyi, 2001; Christie, 2008, 2013; Spaull, 2013; Soudien, Jacklin and Hoadley, 2001; Motala, 2009; Fiske & Ladd, 2004a, 2004b; Gilmour & Soudien, 2009; Chisholm, 2004). Differences in access to meaningful learning cluster along multiple axes where race, class, language, geography and historical differentiated development congeal into complexes of advantage or disadvantage that have proven stubbornly difficult to shift (Christie, 2013, p. 779).

In particular, differences in education opportunity post-apartheid have increasingly coalesced around class rather than race (Soudien, Jacklin & Hoadley, 2001; Motala, 2009; Sayed & Motala, 2009; Fiske & Ladd, 2004a, 2004b; Gilmour & Soudien, 2009; Christie, 2008, 2013; Chisholm, 2004; Hunter, 2010, 2015, 2016). Policy shifts have done little to disturb this coalescence (Badat & Sayed, 2014). In the mid-1990s, as the country embarked under a newly democratic government, a perfect storm was created between global pressures for neoliberal integration after political and economic isolation, and domestic desires for decentralization and freedom of movement seen as antithetical to the apartheid regime of control. In the words of Christie:

(G)lobal inspired policies, while ostensibly responding to demands for more open, inclusive, and democratic educational practices, simultaneously heighten inequalities through promoting neoliberal ideologies that favour (sic) marketization and individual choice above equity and equality in educational provision.

(Christie, 2013, p.782)

Beneath heavy debates regarding equality and equity, however, lurk other questions of adequacy, and whether public school provision is sufficient without substantial private subsidization (Sayed & Motala, 2009). Jacklin (Jacklin & Graaff, 1994) has argued that 'state schools' is a misnomer in South Africa, rather suggesting the term 'state-aided' schools to foreground the state's inadequate provision in the absence of private supplementation.

Elites, whether based on race or class, tend to have disproportionate influence on policy-making processes which can be oriented in their favour, and South African education policy is no exception (Lungu, 2001; Fiske & Ladd, 2004a; Jansen, 2002). Government attempts to bridge inequities based on race, class, geography or language have been met with strong resistance from advantaged communities (see, for example, *Hoërskool Overvaal vs. Head of Gauteng Department of Education*, 2018) who have leveraged their access to ample resources to fight for educational autonomy¹ through the courts in what Sayed (2001) has called the 'juridification' of education conflict. Such juridification is also visible in civil society's attempts to hold government to account for *adequate* provision, efforts resisted by the incumbent political regime beholden to discourses of austerity or under-investment in public goods.

What has played out since the advent of democracy, then, is a typical tale of neoliberal shrinking of the public, but against a backdrop of what was already one of the world's most unequal societies. A small elite of public schools built for whites in colonial and apartheid times now serves a racially heterogenous but economically dominant minority middle class. The vast majority of schools unable to access private supplementation produce woefully inadequate teaching and learning experiences for the majority of the population. The result is low school completion rates especially amongst poor, Black and rural students, extremely weak literacy and numeracy skills as measured by standardized test scores (Simkins & Patterson, 2005), and ultimately lack of access into social and economic opportunities for a marginalized majority of the country's people.

But the gross inequality that still characterises the South African schooling landscape cannot be encapsulated in simple binaries of class, race, language, or urban/rural geographies. Nor do normative descriptions such as 'functional'/'dysfunctional' pay sufficient dues to the incomparable challenges across this terrain. The next section outlines terms used in this study that attempt to overcome these normative classifications, and to suspend judgements of agency in favour of thick descriptors of context.

¹ Schools formerly ringfenced for Whites were granted semi-autonomy in various sunset clauses that were negotiated between the outgoing apartheid Nationalist government and the incoming African National Congress government during the period of 'national unity' in the mid-1990s. This 'semi-privatizing' of the best resourced schools is well documented by Motala (2009), Sayed & Motala (2009) and Tikly and Magoboane (1997).

1.3 Exposed and fortified: capturing complex (dis)advantage

South African schools are distributed bimodally based on their learning outcomes (Spaull, 2013). Often this differentiation is referred to as 'functional' and 'dysfunctional', a normative binary that erases much effort and work in schools that struggle. This is not to say that schools in the latter category are succeeding in their task of effecting teaching and learning for their students, but rather that narrow definitions of 'functioning' eclipse complexity.

To move away from these normative categories, this study borrows Teese and Polesel's nomenclature of 'fortified' and 'exposed' schools (Teese & Polesel, 2003). In their large-scale study of secondary schools in the state of Victoria in Australia, Teese and Polesel found that multiple factors tended to cluster in schools that performed, and concomitantly in schools that struggled. In addition, these factors often exacerbate one another. That study used the terms 'fortified' to refer to schools that could cluster multiple advantages, and 'exposed' to refer to schools that could not:

It is not cultural (dis)advantage that is pooled at these sites, but multiple disadvantage—poor language skills, fragmented family lives, poverty, low levels of parental education, lack of facilities, leisure that is distracting rather than supportive of school. These are indeed 'exposed sites' **in which effective learning depends very largely on the capacity of teachers to make up for the gap between what the academic curriculum assumes about students and who students really are.**

(Teese & Polesel, 2003, p.123, my emphasis)

The sense of unassailability, of 'shored-up-ness' expressed in the term *fortified* captures well the position of those few privileged schools in South Africa that 'function'. These institutions are sufficiently insured against certain types of knocks, are able to weather changes in curriculum and policy, and are able to protect themselves against the vicissitudes of broader society. Exposed schools, on the other hand, are far more vulnerable to shifts in the economy, in public transport systems, to violence and crime, to staff turnover and shifts in student intake, even to the weather.

While this duality is still 'normative' in the sense that being fortified is clearly more desirable than being exposed, it troubles the implicit agency attribution inherent in the 'functional'/'dysfunctional' categorization. Fortified schools should remain so, and simultaneously it is desirable that exposed schools are made less vulnerable. The fortified/exposed categories places neither blame or shame on the staff of either type of institution.

But fortification and exposed-ness are also relative concepts. While one school in this study is relatively 'exposed' compared to the other, it is certainly 'fortified' if considered against a poorer rural school from a former Bantustan, for example. And while a school might be advantaged on one axis (e.g. well located), this is no guarantee of *fortification* as a complex of advantages. The relational, plural nature of the 'fortified-exposed' continuum is discussed further in Chapter Eight.

1.4 Rationale

The primary motivation behind this research is to problematize existing theories of change regarding inequality reproduction in South Africa's schooling system, and to suggest new theories of change on how to reduce this inequality.

Underpinning this desire is the recognition of the enmeshment of social practices and everyday rhythms with material reality in time-space. Geographers have long recognised the role of spatiality and temporality in shaping social practices and deploying power (see, for example, Massey, 1992; McGregor 2003, 2004a, 2004b; Harvey, 1989), but thus far this has been under-examined as it plays out in schools *through* policies.

Theories of change that have informed interventions in South Africa have traditionally been based on school effectiveness and school improvement research. School effectiveness frames tend to decontextualize practice (see Chapter Three for more discussion), whereas school improvement work often fails to connect the macro to the micro systematically. As Shalem (2003) argues, theories of change need to include meaningful opportunities *for* change. This study posits temporalized and spatialized practice theory as able to hold material and discursive factors in conversation with activity and timespace, and that holding such complexity is required when considering the *conditions of possibility for change* in struggling schools—and their underlying policy implications.

1.4.1 Meaningful opportunities and conditions for change—time, space and rhythm

A common refrain from teachers is that of time scarcity and work intensification (Chisholm, et. al. 2005; Abdal-Haqq, 1996; Darling-Hammond & McLaughlin, 2003). Establishing if there are comparable differences in time and space available for teaching and learning across fortified and exposed schools, and how these differences might be underpinned by existing policy frameworks, is necessarily of interest to scholars who wish to understand

the origins of persistent inequality. The interface of examining these differences is via the school's timetable, both intended and enacted through the rhythms of everyday activity.

But a critical theory of time and space is required for such an investigation if *meaningful* opportunities are to be theorized, since this must necessarily include the qualities of time and space, and not just the quantities. In keeping with Lingard and Thompson's (2017) description of schooling temporalities as multiple, this study troubles the use of monochronic clock-time as a 'neutral' inert apparatus of policy that applies equally across all schooling contexts, rather theorising time and space as modes of social power through rhythm. In this way, school activities are kept in dynamic conversation with structural constraints and meaning making (discourse) to understand how policy shapes what happens in schools, and what meaningful opportunities exist for change.

1.5 Connecting policy to everyday reality: the timetable

The approach of this study, then, is to critically consider school timetables, their roots in policy, and their role in the (re)production of schooling inequality.

Relations between policy design and enactment are far from linear or simple (Taylor et. al., 1997; Christie, 2008), and policies' influence on activity is not necessarily guaranteed. The concept of 'policy reach' (Jacklin, 2004a) is developed in Chapter Two to theorize what has been termed 'poor implementation' of education policy in South African schools (see Sayed & Jansen, 2001), and how such policies have come to be considered by some as symbolic (Jansen, 2001) or serving of elites (Fiske & Ladd, 2004a) when juxtaposed against the realities in which they fail to effect meaningful change.

But some policies *do* necessarily reach. Timetables represent a connection between activities in schools and reaching policies that schools cannot ignore. As the primary nexus of the whole school schedule, timetables must contextually coordinate several key threads of available resources to organise routine lessons. The artefact coordinates **who teaches whom, what, with what and where** into a uniform ***when*** for the whole school community.

In policy terms, these correspond to key strands of timetable inputs:

- who refers to teachers, their qualifications, and their distribution between and within schools;
- whom refers to students, and is regulated by the admissions policies that schools apply to applicants (or, in the case of centralised school enrolment, how students are distributed between schools);
- what denotes curriculum subjects—what is taught in schools is constrained by curriculum policies, and which combinations of subjects are considered acceptable for successful school completion;
- with what speaks to the non-personnel/material resources that schools command, and the funds they use to do so;
- where designates spaces of teaching and learning i.e. classrooms, although it also refers to school-level infrastructure and the provision of specialist spaces such as labs and libraries, as well as other spaces that support teaching and learning. Where also applies to a larger scale of space and place, namely a school's geographic location and the effects of this on school activity.

All of these threads interweave and interact on the timetable to construct the *when* of teaching and learning. This interweaving generates interaction effects that are not necessarily considered or intended in any one of the single policies alone, effects that have real repercussions for producing—and reproducing—teaching and learning rhythms.

Effective school timetables appreciate that the qualities of time are just as important as the quantities. Timetables reflect and condense multiple schooling issues: classroom availability, the material qualities of infrastructure, curriculum configuration, teacher subject knowledge, student volumes, student stratification (selecting, streaming and setting), assessment coordination, non-contact time for planning, administration and assessment, extra-murals etc. They can become deeply contentious amongst staff, and, more often than not, reflect an uneasy compromise rather than a unanimous consensus. But, as suggested in the opening paragraph of this thesis, however well or poorly constructed, timetables form the heartbeat of a school.

This five-stranded model, and its relation to policy, will be explicated in more detail in Chapter Four. For now, it provides key threads for systematically analysing how policy distributes and regulates 'resources' in ways that schools cannot avoid.

1.6 Research questions

The research focus of the study can now be framed more specifically by the following key questions:

1. What differences are visible in the timetable of a fortified secondary school compared to that of an exposed school?
2. How do these differences relate to policies that reach?
3. How, in turn, does the timetable regulate rhythms of teaching and learning in each school?

Such analysis will require a conceptual framework that takes rhythms of daily practice as its focus, and examines what factors lead to distinction and differentiation of rhythms in different times and places.

Multiple sources of data were used to relate timetables to policies and rhythms. Firstly, timetables were systematically analysed, producing a typology of timetable properties—elasticity, granularity and modularity—that relate available resources to the qualities and function of these artefacts. Using the five strands described, policies affecting timetables were identified and analysed for how they avail 'resources' and for how the timespace of schools is imagined. Rhythms of teaching and learning were then systematically analysed by recording timetable adherence, with further evidence from detailed qualitative observation data, school documentation, school site maps and interviews with key personnel at each school. Links and relations between policies, timetables and rhythms at each school site were drawn, as well as comparisons between sites.

The role of policies in the (re)production of fortified and exposed positions through timetables is thus presented as a lens for considering inequality in South African schools. Through this lens, different theories of change—and barriers to change—are suggested.

1.7 Thesis outline

This first chapter has identified the problematic of relating policy and enactment in context in schools across deep social inequalities. School timetables have been suggested as a novel lens to identify reaching policies that distribute or regulate schools' access to inputs for constructing sustainable rhythms of teaching and learning. Key research questions for the study were then formulated in relation to timetables and the rhythms they regulate.

Chapter Two lays out the conceptual framework used to analyse timetables, relating 'forms of capital' (i.e. resources that are productive in context) to rhythms of practice. Rhythmanalysis is presented as a frame for studying social practice, holding structures, activities and meanings in dynamic relation to each other. The chapter argues for a common grounding between Bourdieu and Lefebvre's work in temporal and spatial regularities i.e. rhythms.

Chapter Three provides a literature review on timespace—and timetables—in schooling research. Critical conceptions of timespace are foregrounded as potentially offering new theories of change when contrasted against existing theories about how schooling inequalities are reproduced. Chapter Four then presents the methods and design used to produce empirical data for the study. An analytical framework is developed to map reaching policies through layers of enactment into schools. A more detailed rationale regarding school selection is also outlined.

Chapters Five, Six and Seven provide the analytical findings of the research. Chapter Five explores the properties of each school's timetable as it was designed and intended, as well as the forms of capital used to construct them. Comparisons are drawn between each school.

Chapter Six then traces the configurations of these timetables and their differences to the differentiated enactment of key policies in fortified and exposed contexts. A deeper analysis of each relevant policy and its layers of enactment is provided, using the analytical framework developed in Chapter Four.

Chapter Seven then maps forward from the intended timetable to the reality of rhythms of teaching and learning in each school. Key findings of rhythm stability, timetable elasticity and forms of deviation dialogue with schools' fortified or exposed status. The rhythm of teaching and learning for each school is brought into conversation with other rhythms that characterize the movement of bodies, objects and information around the school site. Implications for the eurhythmia and/or arrhythmia between these rhythms is considered. Horizons of planning at each school are brought into view against rhythm stability, and the implications of these for the reproduction of a school's field position.

Chapter Eight brings all three analytical chapters together, summarizing key themes. Implications for schools who are more exposed than those examined in this study are discussed. A rhythmic theory of change is presented as a potential avenue for interrupting cycles that reproduce inequality, suggesting avenues for future research.

2.

Conceptual framework

2.1 Introduction

Having outlined the problematic in the previous chapter, this chapter now develops a language of description for researching timetables and everyday rhythms in school. The conceptual framework draws on practice theory to describe tensions across structures, meanings and activities. Social phenomena are framed as dialectically produced by and productive of timespace (social, mental and physical (Lefebvre, 1991)).

Two theorists' work are drawn upon to construct this language of description: Bourdieu's theory of practice and Lefebvre's conceptualization of timespace and rhythm. After outlining each theorists' key concepts and how they relate, an argument is presented for a shared grounding in both theorists' work in rhythm (what Bourdieu refers to as 'regularity'). Some more detail is also provided on the concept of 'reach' in policy terms, and how reach relates to the influence of official representations as compared to everyday activity.

2.2 Bourdieu

This study draws on the theory of practice developed by Pierre Bourdieu to help achieve three tasks. Firstly, it connects various resources that schools use to their contextual activities in timespace. Secondly, Bourdieu provides a language of description for schooling practice that considers questions of inequality and its reproduction in schools. Thirdly, his theory relationally connects structures, meanings and activities as co-imbricated in social practice, and posits all three axes as necessary for theories of change.

Bourdieu emphasized his intention to 'break' from what he perceived as 'ruinous' dualisms between the dominant modes of theorizing and researching of his time, namely between objective positivism and subjective phenomenological approaches, and structuralist vs. constructivist approaches (Bourdieu 1990, 2000; Grenfell and James, 1998; Bourdieu and Wacquant, 1992).

In response to these dualisms, Bourdieu developed a *relational* theory of practice. The three core concepts of his relational framework—namely *capital*, *habitus* and *field*—cannot be fully understood without each other, although each is analytically distinct. In doing this, he attempted to find a language to describe how choices and actions (i.e. 'agency', or activity) construct structures and meanings (often retrospectively). Yet, simultaneously, structures and meanings inhibit and channel actions and choices, often sub-consciously.

Meaning animates structures and structures regulate meaning (discourse). That is: agency/structure dualisms ignore the mutual reinforcement and co-construction between structures, meanings and choices/activity.

This section outlines the main concepts from Bourdieu's theory of practice and how they relate to this study. Attention is given to the implications of these concepts for timespace and its manifestation in schooling practice. The sequential ordering in this thesis of the triad of concepts Bourdieu offers does not imply primacy or presaging of any concept over others: they are relational and should be read as such.

2.2.1 Field

Bourdieu used the word *field* to denote the social space of a practice (not to be confused with Lefebvre's 'space').

A *field* is a realm of structure, meaning and activity with its own internal logic that does not transfer outside of that field. Examples of fields include art, television, journalism, basketball, football, higher education, the bureaucratic field of state governance, or the philanthropic field of international non-governmental organisations.

Fields are constructed by their occupants, and simultaneously constructing of them. Just as players in a game invent and agree upon rules—and build systems and structures based on these rules—so new players are expected to conform to these agreements. If sufficient players feel strongly enough that the rules need changing, then the field shifts, and a new agreement is reached (not always by negotiation or deliberate design, but often by tacit and subtle changes). Simultaneously, the rules of the game are given sanction by the players' conformance to those rules. But change to the field require changes to what people do in the field, what symbols mean in the field, as well as the systems and structures of the field.

Fields are not physical spaces. They are enmeshed distributed social practices that share common logics. They can also be scaled, with some being geographically confined, and others distributed across time and space. Fields can also be embedded in other fields. For example, the field of test cricket (the sport) is embedded in the field of cricket at large (with some important specificities to the format), which in turn is subject to a broader, more nebulous field of 'sport' with ideals such as 'sportsman-like behaviour' and 'fair competition'. Each 'smaller', more specific field must reinterpret (within limits) what the constraints of the broader field mean in everyday activity. Change at one scale may bump up against, or precipitate, change at another.

Bourdieu reasoned that all fields of practice are subject to the social field of power, which can manifest politically and/or economically. Returning to the cricket example: test cricket is struggling to negotiate its more local rules and traditions in tension with the broader field of economic viability of the practice, as attendance numbers at matches fall in favour of shorter, more 'exciting' formats of the game. Equally, political issues—such as racial or gender transformation—originating in the broader political field of power, have implications for test cricket, how players are trained and recruited, and who is selected. All fields must negotiate, in their own way, the relation of their internal logic with that of power more broadly.

2.2.1.1 The field of basic education

Bourdieu reasoned in many writings (e.g. Bourdieu 1967, 1974, 1986; Bourdieu & Passeron, 1990) that the field of basic education, or schooling, is perhaps the most important specific field for the broader field of power. He argued that schooling is the primary mode of social reproduction beyond the family, and that the conservative nature of schooling gives sanction to de facto inequalities between families by concealing 'means' as merit. Schooling, for Bourdieu, presents an important mechanism for the intergenerational transfer of social power.

Since Bourdieu's initial studies on schooling in France, the importance of this field has only grown. Universal school enrolment is an ideal, if not a norm, across most nation-states. The arrangement of the field of schooling increasingly predicts actors' access to other fields and forms of capital.

Fields are not level, or fair to all occupants. The 'rules of the game' which outline legitimate strategies of engagement are often specified and enforced by dominant groups, who shape field arrangements and meanings to suit their own dispositions. The preferences of the dominant actors are often made in the name of 'common sense' that appeals to shared beliefs embedded in the field rather than on naked ambition to sustain dominance (Bourdieu & Passeron, 1990; Bourdieu, 1990). Such positing of the arbitrary logic of the field as natural is what Bourdieu refers to as *misrecognition*.

But fields operating at different levels of a particular practice are not Babushka dolls of practice. What makes sense at the level of the local (e.g. the micro-field of a specific school and 'how things are done') may be in accordance with, or antagonistic to, the 'official rule' dictated by the broader field (e.g. the field of basic education). In *The Logic of Practice*, Bourdieu described such tensions as primary and secondary strategies: adherence to the official rule might be manipulated and transformed where context makes the official rule non-beneficial. This differentiation between 'official' strategies and pragmatic ones opens

up the conceptual gap for reinterpreting practices at the level of the local in innovative ways not obvious from studying the broader field alone (see “A word on reach” for more discussion on this for this study).

(An example: Cricket World Cup 2019 commentators from the sub-continent describe playing ‘hand cricket’ during lessons at school. Without equipment, and in contravention of the teacher’s instructions regarding schoolwork, students would clandestinely use finger signals to ‘play a game of cricket’ under their desks. This practice is clearly using the rules of cricket, but appears nothing like what conventional cricket would. The practice of the broader field of the sport is taken up and interpreted uniquely under local conditions, but the students are, indeed, still ‘playing cricket’.)

Fields have two properties that characterise them: *doxa* and *illusio*.

2.2.1.2 Doxa and illusio

For practices to actually exert force on actors (or be vulnerable to changes *by* actors), the actors must be engaged *in* the practice in the first place. They must be invested in the purported benefits the practice offers, and preferably use socially sanctioned legitimate means to engage. These benefits are *illusio* (the telos of the game) and the rules of engagement are *doxa*, the shared beliefs about how to play. Each deserves a little more attention, as they are helpful in this study for understanding decisions and activities by actors in schools.

Doxa

Nothing, paradoxically, is more dogmatic than a *doxa*, a set of fundamental beliefs which does not even need to be asserted in the form of an explicit, self-conscious dogma.

(Bourdieu, 2000, p.15)

Doxa is Bourdieu’s notion of shared, assumed, common belief, specific to a field of practice. It is central to the construction of the *misrecognition* necessary for the unquestioned dominance of some and marginalisation of others in the field. Subscription to the *doxa* of a field sustains the investment of marginalized and dominated actors, maintains their beliefs in the rewards that success in the field promises, and obscures the arbitrariness of the game set against them.

Examples of *doxa* are easier to see in fields in which the observer is not embedded. Reflecting on tacit assumptions “linked to membership of a field, and to adherence, which is unanimous within the limits of the field, to the *doxa* which distinctively defines it” (Bourdieu, 2000, p. 11) is almost impossible for those embedded in the field of practice.

An example of *doxa* which is easy to observe (since most people do not participate in it) is the military, where specific ideals of conduct, purpose, ethic and hierarchy are critical to the practice. Actors who reject such ideals necessarily self-exclude from the practice, by default or by sanction. But the *doxa* of military practices is unquestioned by those who participate in those practices, even if it is heavily criticized in, say, critical philosophy or pacifist circles.

Closer to the subject of this study, the ubiquitous field of institutionalised schooling also promotes tacit assumptions that are fundamental to its continued operation in its current form. Schooling requires shared beliefs in the necessity of school-based learning for economic success, in knowledge as a normative means for self-actualisation, along with other less lofty beliefs e.g. faith in assessment results, and their tokens, as valid measures of students' ability.

Monochronic, inert, a priori timespace as a doxa of the macro field of power

One of the most prevalent—and difficult to interrogate—forms of *doxa* in modern society is how timespace is conceived. Tacit definitions of time as that of the clock, and space as that of the metre (or mile), are so ubiquitous and 'common-sensical' that they are hard to notice as the social constructions they are (see "Timespace" below).

Neither clock-based time, nor Cartesian formulations of space, are unique to the practice of schooling, although they are intensified in schools. These discursive framings of timespace are so powerful and so unexamined because they are in fact a *doxa* of the super-field of economic and political power which Bourdieu reasoned subsumed all other fields of practices.

Illusio

While subscription to *doxa* necessarily requires engagement *in* the practice, *illusio* is the potential advantage for which actors invest in practice in the first place. Doxa constitutes 'how to play', whereas *illusio* refers to the stakes of the game.

Using the previous examples: in the case of military practices, the *illusio* of military practice rests on a nation-state's desire to protect its interests. Without this fundamental assumption of sovereignty, and the right to defend it, having a military makes no sense.

Similarly, schooling practices also have an *illusio*, namely that the learning acquired at and through school is of value. Students who are *disillusioned* in the literal sense find themselves questioning the *illusio* of schooling, and hence disinvest from participating in the game of schooling at all (a disinvestment which may be at odds with a legal framework that obliges school attendance).

Practices and their fields often promise improved social or economic standing to participants, primarily through increased access and claim to various forms of *capital*.

2.2.2 Forms of capital

Chapter One suggested that a decontextualized definition of resources was insufficient. Bourdieu's concept of *capital* provides a more nuanced definition of the substance of exchange in social practices. Capital, Bourdieu reasons, comes in multiple forms (1986, 1990, 2000). But not all resources are capital: a resource is only realised as capital when deployed in a field in which it is recognised as valuable. The *relation* between a resource and the field of practice is what makes capital meaningful in context.

2.2.2.1 Economic capital

The most obvious form of capital with which most are familiar is economic capital. Assets and currency, explicit commodities... these are economic capital. Most classic material analyses of social inequality tend to focus on economic capital (Bourdieu, 1986). Economic capital includes objects and material goods e.g. land and/or buildings, vehicles, tools and instruments.

Economic capital is often the base form to which other types of capital are related: cultural capital enables future potential earning (e.g. education, skills for higher earning jobs etc.), and social capital ("it's not what you know, but who you know") is also often leveraged for access to, or acquisition of, economic capital, either in the immediate or distant future.

2.2.2.2 Cultural capital

Less familiar to classic analyses of capital is cultural capital, which in Bourdieu's work comes in two forms: embodied and objectified (Bourdieu, 1986). Cultural capital, its misrecognised transmission, and its (disavowed) exchange-value *with* economic capital is, for Bourdieu, a major mode of sustaining power and domination.

Embodied cultural capital can include knowledge learnt (which takes *time* to acquire and cannot be delegated, like a 'muscular physique' or a 'suntan' (ibid.)), or an accent, or bodily bearing (see "Habitus"). *Objectified* cultural capital includes books, art, clothing, designer furniture, musical tastes, and all the trappings of markers of 'distinction' which are broadly interpreted as indicative of 'cultured habits', education and 'superior' social standing (Bourdieu, 1984).

Schools and the schooling system are fundamental to dominance strategies premised on cultural capital (Bourdieu & Passeron, 1990), being the institutions tacitly bent towards

middle-class tendencies (in knowledges valued and methods deployed), while posing themselves as neutral. Pedagogic action can never be neutral (ibid.), and the strangeness of schooling practices for some which are 'normal' for others is what Bourdieu & Passeron call *symbolic violence*. This familiarity/strangeness is rooted in the relation between the cultural capital of the school and that of the home (Bourdieu, 1986).

Schooling's contribution to the intergenerational transmission of cultural capital is dwarfed by the role played by the family:

Because they (economists) neglect to relate scholastic investment strategies to the whole set of educational strategies and to the system of reproduction strategies, they inevitably, by a necessary paradox, let slip the best hidden and socially most determinant educational investment, namely, the **domestic** transmission of cultural capital.

(ibid., p.243, my emphasis)

By expecting all students to perform equally at school, irrespective of their domestic upbringing, schools serve two functions: firstly, they disguise intergenerational transfer of capital for wealthier students, whose success at school is posited as merit rather than as familiarity; and secondly, they socially sanction the existing inequalities with which students arrived at school (Bourdieu, 1974).

Cultural capital begets cultural capital: the time spent in early socialization of the family makes familiar (or strange) the practices of the school, which in turn make acquisition of the knowledge from school more or less natural and comfortable. But economic capital begets cultural capital too. Cultural capital, acquired through school and learning, is intrinsically enmeshed with timespace through what Bourdieu terms *skholé*. **Skholé, freedom from economic need** and pressure, frees up the agent to spend effort and time acquiring cultural capital, in object and in body (Bourdieu, 1990, 2000) i.e. to study.

Time liberated from practical occupations and preoccupations, of which the school organizes a privileged form, studious leisure, is the precondition for scholastic exercises and activities removed from immediate necessity.

(Bourdieu, 2000, p.13, my emphasis)

The scholastic situation implies, by definition, **a particularly free relationship to what is normally called time**, since, as a suspending of urgency, the pressure of 'things to do', of business and busyness, it inclines us to consider 'time' as a thing with which we have a relation of externality, that of a subject facing an object.

(Bourdieu, 2000, p.206, my emphasis)

Skholé is *the mode of transmission from economic capital to cultural capital*, and it is of particular importance for schooling inequalities along economic lines.

2.2.2.3 Social capital

The third form of capital is that of relationships in what Bourdieu termed *social capital*. Connections and favours, *gift exchange* (whose work as an explicit form of exchange is hidden by 'the work of time' i.e. the delay between receiving and reciprocating—see Bourdieu, 1990) is capital manifesting as honour and ingratiation i.e. value bound up in reciprocal assistance of various forms. Social capital is distributed in networks of people who may deploy their cultural and economic capital to assist each other (always with the tacit expectation of some form of reciprocity at a later date). In effect, social capital is lending and borrowing beyond a narrow economic form of money and contracts.

Social capital functions best when sufficient distance is placed between credit and debt, between gift and counter-gift, so as to create the sense of generosity and charity, and thereby enable disavowal of self-interest.

2.2.2.4 Symbolic capital

While some have interpreted symbolic capital to be explicit objects and symbols (e.g. trophies, accolades and certificates of accreditation) which serve to represent past capital investments and acquisitions, in *Pascalian Meditations* (2000) Bourdieu eventually described all capital as symbolic in that all capital holds agreed meaning between its bearer, its witnesses and its recipients. The scope of this meaning differs depending on the field in which the capital is recognised and symbolises *something*, but all forms of capital carry symbolic weight of varying depth and breadth. The contingency of the meaning of a symbol, and its efficacy to signal certain social standing and/or merit, is wholly dependent on the shared codes of meaning and the institutional forms these take. Capital requires a field.

Schooling, as a field, requires broad recognition of the symbolic capital signalled by examination and certification. Examination results translate the cultural capital acquired at school into a form recognised beyond the field of schooling, to be taken and deployed in the broader field of economic and political power. Individual schools acquire position in the field through the assessment results of the students they enrol. In this way, symbolic capital acquisition forms the *illusio* of schooling for both schools as institutions and students as individuals.

2.2.2.5 The compounding effects of capital

Capital begets capital, but not always of the same form. Social capital is enhanced when the network of other actors themselves have access to economic or cultural capital. Cultural capital is dependent on the presence and recognition of others who accept its exchange value and symbolic importance. Economic resources are valueless in the absence of others with whom to trade goods and/or services. It is the exchangeability of one form of capital for others that predicts desirability and value.

Habitus was described earlier as a form of embodied cultural capital. But the concept of habitus is also productive and warrants further explanation. Habitus forms the third element of Bourdieu's triad in his theory of practice.

2.2.3 Habitus

Bourdieu's instantiation of *habitus* has been described by some as 'slippery' (Maton, 2014). Contrary to widespread writings that attribute the concept of *habitus* to Bourdieu directly, it is a far older concept first developed by Aristotle (Wacquant, 2016), which Bourdieu reworked as part of his theory of practice. Wacquant attributes Bourdieu's reworking of *habitus* as an attempt to "**reintroduce time** and the inventive capacity of agents... without falling back into the Cartesian intellectualism that skews subjectivist approaches to social conduct" (ibid., p.64, my emphasis). Habitus is fundamentally the embodiment of the work of time(space), the past at work in the present through 'systems of durable transposable dispositions':

The conditionings associated with a particular class² of conditions of existence produce *habitus*, systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them.

(Bourdieu, 1990, p.53)

² Note here that Bourdieu does not necessarily mean 'class' in an economic sense, but rather a group, or cluster.

For Bourdieu, the habitus is both generative and constrained, both *modus operandi* (process) and *opus operatum* (product) (Bourdieu, 1990). As a 'structured structure', habitus is the product of the period of socialization in a 'particular class of conditions of existence'; as a 'structuring structure', it is a (preconscious) process which 'generates and organizes practices and representations' across time and space.

Habitus lacks specific *telos*—it is not oriented towards particular goals and ends explicitly. Rather, habitus could be considered as a 'style', an instinctive approach to being and doing borne of early socialization and often unexamined. And because habitus is often deployed in not only interpreting the world according to the agent's internal schemas, but also in *creating* the world in accordance with those schemas, it is both structured (informed by past and present circumstances) and structuring (foregrounding or obfuscating information and, in doing so, shaping decisions that will define the future self). Habitus is also, itself, a structure—that is, it is not a random coalescence of experiences, but an internal logic, even if this logic is constructed and/or articulated posteriori. Finally, habitus persists over both space and time, being transferable and durable between different circumstances and social settings, becoming notoriously hard to shift once embedded.

But habitus is not a demographic categorization. One of the main mis-constructions of habitus as a concept, according to Maton (2014), is a reduction to a person's social background or history, thereby stripping habitus of its generative properties through interacting with the field. Rather, habitus is brought to bear as constructing the decisions an individual will make in the present premised on the past in accordance with the current circumstances with which the habitus interacts towards an instinctively sensed forthcoming (Bourdieu, 2000).

Perhaps one of the best definitions of habitus does not come Bourdieu himself, but from one of his contemporaries:

To speak of the subject now is to speak of duration, custom, habit, and anticipation. Anticipation is habit, and habit is anticipation: these two determinations—the thrust of the past and the élan toward the future ... are the two aspects of the same fundamental dynamism. ... Habit is the constitutive root of the subject, and the subject, at root, is the synthesis of time—the synthesis of the present and the past in light of the future.

(Deleuze, 1991, p.92-93)

Orientation driven by anticipation—a 'sense of the game'—is at the heart of habitus. Such a definition begins to uncover the temporal and spatial underpinnings of the concept: it is when a habitus rooted in a different temporal or spatial order finds itself at odds with the field of practice that the 'lack of fit' becomes obvious.

A close reading of *The Logic of Practice* supports the claim that temporality is not just a feature of habitus (as suggested by Elliott et. al.'s concept of 'temporal disposition' (Elliott et. al., 2017)), but constitutes *the primary axis* of practical fit and mutual co-construction between agent and social world. The 'sense for the game' that Bourdieu describes in his heavily used metaphor of practice as competition-cum-sport is primarily a sense of *timing*. It is also a spatiality, performed and reproduced through the body as *bodily hexis*: through voice, gesture and stance, "embodied history" (Bourdieu, 1990 p.54) and "producing history on the basis of history" (ibid.).

Habitus helps to overcome some of the issues often confronted in existing theories of change in education. It incorporates both the capacity for change and novelty, along with regularity and predictability of people 'doing what they've always done'. Bourdieu writes:

This infinite yet strictly limited generative capacity is difficult to understand only so long as one remains locked in the usual antinomies—which the concept of the *habitus* aims to transcend—of determinism and freedom, conditioning and creativity, consciousness and the unconscious, or the individual and society.

(Bourdieu, 1990, p.55)

Holding habitus in relation to field and forms of capital provides both explanatory power as to why people do what they do regularly without examination or forethought, as well as potential points of disruption for change by exposing the 'game' and its misrecognition.

2.2.4 Critiques of Bourdieu

While many have exalted or vilified Bourdieu's work, two particular criticisms relate to this study.

2.2.4.1 Criticism 1: Bourdieu strips actors of agency

Some critics have accused Bourdieu of stripping actors of their agency, suggesting his framework inherently frames actors as blindly follow the diktat of the field without thinking (e.g. Jenkins, 2002; Burawoy, 2012). Such a framing erases creative potential for rupture and surprise. While Bourdieu's focus on reproduction may seem closed, such a reading is taking his critique of rational actor approaches as his whole theory.

Bourdieu reasoned the presence of an inherent *logic* in the way people do what they do, even though these behaviours and activities do not correspond with what is known as

'formal logic' or rationality³. He was deeply critical of rational actor approaches, not only because actors could not ever possess all the information required to *be* rational, but because such a framing of decision-making and activity made no allowances for the fact that for most of people's lives, they are not thinking about what they are doing at all, certainly not *a priori*. Nor are they responding to fixed 'rules'. They just do and are:

Practices can have other principles than mechanical causes or conscious ends and can obey an economic logic without obeying narrowly economic interests. There is an economy of practices, a reason immanent in practices, whose 'origin' lies neither in the 'decisions' of reason understood as rational calculation nor in the determinations of mechanisms external to and superior to the agents.

(Bourdieu, 1990 p.50)

But: the pre-conscious origins of everyday doing and being does not close the gap for change and disruption (see Mills, 2008). Rather, it merely foregrounds the exceptionality of change in a sea of habit. Activities are constantly adapting in micro-increments, locally interpreting rules within context as required (see the prior example of 'playing cricket').

2.2.4.2 Criticism 2: Bourdieu's theory only allows for selfish individual interest

A second criticism of Bourdieu relates to his framing of actors as always narrowly individualistic in their interests (see "Is a disinterested act possible?"—Bourdieu, 1998; see also Jenkins, 2002).

This criticism holds more water: throughout his work, Bourdieu does not make much space for the role of the collective beyond the aggregated interests of the individuals within such a collective (see Calhoun, 2002). For Bourdieu, there are no altruists. However, in a moment of totalizing capitalism where individualism is a dominant mode of organising as well as imagining the world, such a theory still offers an appropriate language of description. That Bourdieu's framework does not assist in imagining interest in non-individualist terms does not detract from the usefulness of his work for describing the way a Western, modern, capitalist society actually operates. Even his detractors (Jenkins 2002) describe him as "extremely good to think with" (p.17).

³ A difference he illustrates using the play on words: "Logic of Practice" vs. "Practice of Logic"

Despite leaning towards stasis rather than change, Bourdieu's work is productive when used as a lens on Western modern forms of schooling, if for no other reason than to pierce myths (the 'misrecognition') of schooling and its role in social reproduction. It is decloaking misrecognition that Bourdieu describes as the most powerful prompt for change offered by his work (e.g. see *Firing Back*, 2003; *Sketches for a Self Analysis*, 2004a; *Political Interventions*, 2008).

2.2.5 Bourdieu and policy

Little is said about policy and governance explicitly in Bourdieu's work. Rather he refers to *official representations* which would include idioms and 'folk wisdom' as well as institutional policy:

Officialization is the process whereby the group (or those who dominate it) teaches itself and masks from itself its own truth, binds itself by a public profession which sanctions and imposes what it utters, tacitly defining the limits of the thinkable and the unthinkable and so contributing to the maintenance of the social order from which it derives its power.

(Bourdieu, 1990, p.108)

He continues:

(T)he official rule determines practice **only when there is more to be gained by obeying than by disobeying it...** (b)ut it must not lead one to forget that the official definition of reality is part of a full definition of social reality and that this imaginary anthropology has very real effects. One is right to refuse to credit the rule with the efficacy that legalism ascribes to it, but it cannot be forgotten that there is an interest in 'toeing the line' which can be the basis of strategies.

(ibid., my emphasis)

This last extract highlights the gap between the 'official rule' and what *really* happens in practice, what in policy terms are considered 'issues of implementation'. As McLaughlin (1987) observed, those in power can't mandate what matters on the ground.

Policies are, then, *rules* which—while failing to capture the *regularities* at the heart of practical logic—can be seen as attempts by those in power to shape what matters towards their own ideal ends without a loss of legitimacy amongst those they govern. "Politics is the arena *par excellence* of officialization strategies." (Bourdieu, 1990, p.109). He continues:

Strategies directly oriented towards primary profit (of capital) ... are often accompanied by second-degree strategies aimed at giving apparent satisfaction to the demands of the official rule.

(ibid., p.109)

The primary and secondary strategies agents deploy to give acknowledgement to officialization, while still considering their immediate practical concerns, are a function of potentially competing or contradictory logics between different fields at local and broader levels. These potential contradictions will become a useful concept later in this study.

2.2.5.1 The bureaucratic field: modern governance

Bourdieu also attempts to trace the 'genesis of the bureaucratic field' in his essay *From the King's House to the Reason of State* (2004b). He argues that the bureaucratic state is "a field of forces and a field of struggles oriented towards the monopoly of legitimate manipulation of public goods." (ibid., p.16). In particular, modern forms of government depend on symbolic and cultural capital to construct the logic of bureaucracy and political participation. Shaping the field of schooling through education policy hence becomes an arena of contestation for dominance in the broader field of political and economic power.

The conceptual definitions presented in this section have explicitly foregrounded timespace, since the relation between timespace and practice is of interest to this study. The next section briefly summarises Bourdieu's explicit writing about timespace.

2.2.6 Bourdieu and timespace

Towards the end of his career, Bourdieu finally made explicit the ever-present but, until then, under-stated roots of his theory in timespace and temporality. In *Pascalian Meditations: Social Being, Time and the Sense of Existence* (2000) he finally lifts out of his relational schema the grounding concept of timespace. Practice *is* temporal, and it is embodied.

Most of Bourdieu's concepts are, on close examination, dependent on an emergent theorising of timespace and timing.

Capital—particularly cultural capital as acquired through school and *skholé*—directly relates to the differentiated regulation of, and power over and through, timespace. Resources deployed at the wrong moment, or in the wrong place, do not constitute capital. Habitus, too, was outlined earlier as imbricated with timespace. And field presupposed a particular sense of *timing*: of appropriate or inappropriate anticipation and action. The fit between habitus and field is a relational one defined by an emergent synchronicity, a sense of the right 'timing' and tempo which creates the seeming good fortune of being in the right place at the right time (what Bourdieu refers to as a sense of the 'forthcoming') so as to maximise capital exchange and acquisition in accordance with the logic of the field. Conversely, misfit between habitus, capitals and field produce an a-synchronicity, a

'misfiring' (Bourdieu, 1990). Practice is temporal and spatial, but—as later discussed with the work of Henri Lefebvre—far from happening *in* timespace, practice also *produces* timespace (Schatzki, 2010; Adkins, 2009).

2.2.6.1 The modern doxa of inert, objective timespace

The dominant discourse of timespace as clock time and Cartesian space will be explored further below when discussing the work of Henri Lefebvre. But Bourdieu was not silent on this discourse or its origins as a *doxa* for modern practices and habitus formation. He postulated the origins of doxic objective timespace as scholarly practice. When scholars distance themselves from the world with an objectifying, disinterested gaze, a vision of time is generated that is...

(r)einforced by the habits of ordinary language, which make time something that one has, that one gains or wastes, lacks or has on one's hands, etc. like the body-as-thing of the Cartesian idealist vision, time-as-thing, the time of clock-makers and scientists, is the product of a scholastic point of view which has found its expression in a metaphysics of time and history which considers history either as a pregiven reality, a thing in-itself, previous and external to practice, or as the (empty) *a priori* framework for every historical process.

(Bourdieu, 2000, p.206, my emphasis)

That is, the almost universal framing of time as that of the clock, and space as Cartesian space, is rooted in elite practices of positivist, 'objective' enquiry that—with their rational framings of the world—fail to take into account practical everyday doing and being and the role of the subject *in* the world.

2.2.6.2 Bourdieu and *material* timespace?

Shot through with tempo and enacted in body, Bourdieu's entire theory of social practice is a temporalized, spatialized framework. Objective social timespace exists in the persistent structures and arrangements of the field constructed by its (past and present) participants, and subjective timespace is experienced bodily through the *habitus* and its fit with the field, as well as objectified in forms of cultural and economic capital.

But while his theory of multiple forms of capital allows for a pluralist and contingent understanding of value, Bourdieu doesn't elaborate how physical, material timespace is as much formative *of* as formed *by* human practice. The value capitals have is not only a function of its symbolic worth in human eyes, but is also rooted in real physical factors.⁴

⁴ In Marx's terms: a use-value as well as an exchange-value.

The site of activity is not only produced by practice but is also productive of practice. Physical materiality is relational with social timespace and practice⁵.

In terms of the threads outlined in the previous chapter, Bourdieu provides tools for thinking about who and whom (habitus and embodied cultural capital), what (cultural capital and field) and with what (various forms of capital). But he does not give tools for thinking about where practice occurs in material timespace.

For this study, then, Bourdieu's concepts require augmentation with a language of description to grapple with a plurality of timespace, of both physical and social origins. The work of Henri Lefebvre is discussed in the next section to assist with this language, drawing on his work in *The Production of Space* (1974/1991) to theorise plural timespace, as well as *Rhythmanalysis* (1992/2004) to relate everyday activity to timespace.

The final section of the chapter argues that Bourdieu and Lefebvre's work share a common assumption of *rhythms* as the ground for human activity enmeshed in a physical and social world.

⁵ It would be untrue to state that Bourdieu *never* considered the role of physical timespace as conditioning of practice—his work on the Kabyle household (Bourdieu 1977, 1990) is a precise and detailed description of social practices rooted in seasons and farming. Rather, Bourdieu's *theory* of practice does not account for the role of physical timespace, and/or cosmological and biological rhythm and routine in forming and shaping social practice.

2.3 Lefebvre

Amongst Anglophone scholars, Lefebvre is most well-known for his seminal work *The Production of Space* (1974/1991), although his oeuvre in French is considered to be far broader (Elden, 2004; Merrifield, 2006). His work on space has been picked up in education in what Lingard and Gale (2007) termed a 'spatial turn' in education research.

Less common in Anglophone education work is reference to Lefebvre's work on rhythm (*Rhythmanalysis* 1992/2004, also *Critique of Everyday Life* Vol. 2 and 3), although this is increasingly being recognised (see Jacklin, 2004a, 2004b; Middleton, 2014; Alhadeff-Jones, 2017).

Unlike Bourdieu, Lefebvre's work is not underpinned by a single clear theory and set of concepts, but rather a 'fluid constellation of concepts' (Kipfer, 2009) in themes and refrains that echo through various texts. Of interest to this study is how Lefebvre can help with the where of school timetabling and practice, as well as enhance the concepts already outlined from Bourdieu earlier in this chapter—to this end, his work on space and everyday life is pertinent.

Finally, it is worth noting that Lefebvre described social research as

... a colossal interaction of *levels*, from the subatomic to the galactic, from microcellular organisms to living species, from small social groups to the large sociocultural formations we call 'civilizations'.

(Lefebvre, 2014, p.414)

This 'interaction of levels' is a good description of the structure of this thesis, through concrete school rhythms rooted in quotidian activities (such as moving between classes or marking tests) to the multiple enaction and interpretation of policies at different bureaucratic levels in the schooling system as seen through timetables.

2.3.1 Timespace

2.3.1.1 Timespace as opposed to 'time' and/or 'space'

The choice of the term 'timespace' warrants further explanation. Lefebvre sought to trouble what he saw as an overemphasis on time from the works of Marx and others⁶ to reinject the spatial into theorising social practice. The intent was not to *replace* the

⁶ The habit of focusing on time without including space continues: e.g. Gell (1992), Adam (1990, 1999) and others. See "Time in schools" in Chapter Three.

temporal with the spatial, but to argue that the two cannot be considered in isolation without the other (Elden, 2004; Middleton, 2014; Massey, 1992; May & Thrift, 2001). For Lefebvre, as for other theorists—both of the social (e.g. Schatzki, 2010; Harvey, 1989) and the physical (e.g. Hawking, 1988; Rovelli, 2018)—time and space are not separable, but are simply different facets of the same phenomenon. The term ‘spacetime’ is often used amongst theoretical physicists to refer to the unitary fabric of time and space together. This thesis uses the term ‘timespace’ as used by Schatzki (2010) to refer to *social* time and space as a single entity.

2.3.2 Different types of timespace

Lefebvre theorised timespace as ternary: physical timespace, mental timespace and social timespace. Physical timespace was his term for the natural, cosmological world, independent of human beings. Mental timespace was the realm of the ideal forms dreamt up by mathematicians—Euclidean geometry, mathematical sets, topology—which can only be approximated in the real world⁷, and provide a partial definition of the real world⁸.

Social timespace was what interested Lefebvre the most. He considered all three types of space to be mutually imbricated: society takes place *in* and with the natural world, and utilizes the tools from theoretical and abstract space for very real purposes. However, he was deeply critical of how ‘mental’ timespace, with mathematics and science as its proponents, was wielded socially through ‘objective’ philosophical or empirical analyses (or by “technocrats in their silent offices”, 1991, p.6) to examine the practical and the concrete without any concern for how these formulations of timespace cannot totally represent social complexity (Lefebvre, 1991):

Like all social practice, spatial practice is lived directly before it is conceptualized; but the speculative primacy of the conceived over the lived causes practice to disappear along with life, and so does very little justice to the ‘unconscious’ level of lived experience *per se*.

(Lefebvre, 1991, p.34)

This transference of mental models of ‘objective’ timespace (normally Cartesian space and clock time) onto the social is discussed more in the literature review (Chapter Three) when

⁷ Take, for example, the first three definitions of the first book of the Elements of Euclid:

“A *point* is that which has no parts.

A *line* is length without breadth.

The extremities of lines are points.” (Byrne, 1847, p.xviii)

⁸ Since such ideal forms are themselves part of the real world (as are all meanings), such formulations of timespace are not other than, or apart from, reality. See ‘Critical Realism’ below.

existing research on the timespace of schooling is considered. But the problematic of 'inert', 'neutral', 'objective' timespace as universally applicable and conceptually sufficient across all social contexts and practices is a key consideration for this study. As discussed under the section on Bourdieu, the application of monochronic clock time and Cartesian space could be considered a *doxa* of modern, technocratic social practice: a partial but powerful frame that suggests itself as neutral and natural, and hence beyond reproach (at least in modern capitalist society). This mistaking of rational models of timespace for reality—and the non-neutrality of such impositions—was a central concern for Lefebvre:

A representation of space—which is by no means innocent, since it involves and contains a strategy—is passed off as disinterested positive knowledge. It is projected objectively; it is effected materially, through practical means.

(Lefebvre, 2014, p.807)

In *The Production of Space*, Lefebvre proposes a further triad for considering and analysing social timespace: *timespace-conceived*, *timespace-lived* and *timespace-perceived*. Distinguishing between these different types of timespace opens the gap between rational bureaucratic ideals of timespace and practice in everyday life.

Each of these is elaborated in more detail below.

2.3.2.1 Timespace-conceived⁹

The first form of social timespace is *timespace-conceived*: how timespace is planned, ordered, sequenced, represented and organised. Calendars, clocks, schedules, maps and timelines are all examples of timespace-conceived. They are representations of one or more facets of the real, and often based on assumptions grounded in abstraction. Timespace-conceived almost always manifests in representations which necessarily suffer what Bourdieu identified as 'synoptic illusion'¹⁰—the mistaking of the representation of the world for the world itself.

⁹ This triad is also referred to in various literature as "representation of spaces" (conceived space), "representational spaces" (space perceived), although there is confusion and disagreement between various translators as to the fidelity of these particular terms. To avoid confusion, this study uses 'conceived' for how timespace is conceptualized and operationalized, 'perceived' for how timespace is experienced, and 'lived' for temporal-spatial practice to distinguish between Lefebvre's different types of space.

¹⁰ Just as timespace-conceived is part of the world, so too synoptic illusions and models of the world form part of the world. But Bourdieu cautions against mistaking 'the model of reality' for the 'reality of the model' (1990).

Conceptualized space, the space of scientists, planners, urbanists, technocratic subdividers (sic) and social engineers... all of whom identify what is lived and what is perceived with what is conceived. ...This is the dominant space in any society.

(Lefebvre, 1991, p.38-39)

For this study, timespace-conceived manifests in two particular forms for schools: the timetable itself (as an organised monochronic schedule for schooling activity), and in how policies tacitly or explicitly define timespace for schooling. School timespace is, however, not independent of how institutional timespace is conceived and envisioned for society at large, including news cycles, work days and holidays, calendars, clocks and maps.

2.3.2.2 Timespace-lived

Timespace-*lived* refers to the complex of practices—meanings, structures and activities—as they unfold in everyday life. Far from the orderly logic of timespace-conceived, lived timespace includes deviation from intention, how agents experience routines, activities and spaces, and attribute meaning and memories to them, the boredom of an hour unfilled or the frenetic rush of a deadline¹¹. Timespace-lived is how practice produces and is produced by timespace in an emergent relation, where neither timespace precedes practice, nor practice precedes timespace (Schatzki, 2010). Timespace-lived *is* social practice and all its facets.

The spatial practice of society secretes that society's space; it propounds and presupposes it, in a dialectical interaction; it produces it slowly and surely as it masters and appropriates it.

(Lefebvre, 1991, p.38)

2.3.2.3 Timespace-perceived

Timespace-perceived speaks to the subjective experience of the everyday. Lefebvre reasons timespace-perceived is represented through art and symbolism, giving spatial expression to the emotions and meanings attributed to timespace by its occupants who both produce and are 'produced'. In schools, timespace-perceived could be witnessed through graffiti, artworks by students and staff, through care or neglect, the qualities of

¹¹ An example: where timespace-*conceived* models the flow of traffic through rush hour using fluid dynamic equations, represents it on smart phone map apps, or reports it via the news bulletin, timespace- *lived* is the reality of the hot car, the smell of diesel, the missed appointment and the concomitant shifts in practice in driving style, in accident frequency, in reshuffled meetings, and in collective expectations of punctuality. Not only does the traffic in reality change what people caught in it actually do, but it also changes how they anticipate their future, as well as interpret their past. Timespace-*perceived* is the frustration of the drivers caught in the traffic, the dread of a motorist who needs to get across town, the boredom of the child in the backseat, or the hubris of the motorcyclist who lane splits through the cars.

interactions between agents in the space, or in how the ideal timespace-conceived of the school is accepted, or rejected and resisted.

According to Lefebvre, everyday life produces **and is produced by** timespace. This dialogic relationship between practice and timespace provides the tools required to think about the where of schooling and how it manifests in everyday rhythmic activity.

2.3.3 Rhythm

Far more concrete and less esoteric is Lefebvre's work on *rhythm*. First alluded to in *Critique of Everyday Life Vol 2* (first published in French in 1961), Lefebvre's final work on rhythm and studying rhythm—what he terms *rhythmanalysis*—was only published in English in 2004. With rhythm, Lefebvre brings together regular-yet-unmechanical activity and timespace.

(There is) no rhythm without repetition in time and space, without *reprises*, without returns, in short without **measure**. But there is no identical absolute repetition indefinitely.

(Lefebvre, 2004, p.16, original emphasis)

Lefebvre used music as a metaphor for explaining social rhythm in everyday life. Like music, rhythm is both cyclical (repeating, a refrain or riff) and linear (from the start of a piece to the end)¹². Rhythm orders, sequences and synchronises, but also calibrates the tempo in space, in the body, in the cosmos, in the material spaces of society. The repetition of a rhythm is never exact, or mechanical ("absolute repetition is only a fiction of logical and mathematical thought"—Lefebvre, 2004, p.17), but is sufficiently regular as to be predictable.

There are three types of rhythms for Lefebvre: physical/cosmological e.g. orbits around celestial bodies, tides, seasons, night and day; biological e.g. the heartbeat, the breath, reproductive and circadian cycles; and social e.g. the work day, festivals and holidays. Most, but not all, are cyclical. Social rhythms, however, are also linear... birth to adulthood, coupling, old age and death. And time itself is unidirectional, even if not experienced as such (Adam, 1990; Gell, 1992). Timespace and rhythms are both *simultaneously* cyclic and linear: "Cyclical repetition and the linear repetitive separate out under analysis, but in *reality* interfere with one another constantly." (Lefebvre, 2004, p.18, original emphasis).

¹² Adam (1990) summarises much work on theories of social time, which also formulate time as both cyclical and linear.

Modernity, for Lefebvre, emphasises the linear rhythm in ways that traditional society did not. 'Development', 'goals' and 'progress' are alien to the preindustrial agrarian rhythms of the farm and the home. The linear, artificial rhythms of modern work and society built around production seek to crowd out natural impulses (although never quite succeeding) (Lefebvre, 2014).

2.3.3.1 Rhythm is qualitative and quantitative

Practice framed rhythmically presents an amalgam of the quantitative and the qualitative:

Rhythm reunites quantitative aspects and elements, which mark time and distinguish moments in it—and qualitative aspects and elements, which link them together, found the unities and result from them. Rhythm appears as regulated time, governed by rational laws, but in contact with what is least rational in human being: the lived, the carnal, the body.

(Lefebvre, 2004, p.18)

In schools, the progression of students through the school is linear and age-based, from grade to grade, until they graduate. The calendar year is laid out in a strict ordering, from the first to the last term, each building on the previous. But the weekly/fortnightly timetable is cyclical, as is the experience of school for the staff, who each year see new students come into the lowest grade, and old students leave the highest. No two years are alike, but each exhibits similarities and predictabilities based on the rhythm of school. Student 'progress' through school can be quantitatively 'measured' by assessment, yet for all the complexity of the measuring tools, never captured in its totality. Lessons as the heartbeat of the school can be measured and uniform, routine and predictable, and yet each lesson is unique and no two hours alike.

2.3.3.2 Polyrythmia, eurhythmia and arrhythmia

Lefebvre suggested a theoretical typology of rhythm: polyrythmia, eurhythmia and arrhythmia. Rhythms are almost always polyrhythmic: very few (if any) exist in isolation. The ticking of a clock is simultaneous to a footstep, a heartbeat, a season's passing, the traffic of a city, a school bell. Lefebvre's proposed method of *rhythmanalysis* was primarily in paying attention to polyrythmia in everyday activity.

But rhythms can be more or less harmonious. *Eurhythmia* refers to a unity in rhythm, which Lefebvre described as 'healthy', whereas arrhythmia is discordant, unhealthy, chaotic. It is tempting from this distinction to think of arrhythmia as lacking rhythm, but this is not entirely what Lefebvre means. Rather, arrhythmia has its own rhythm, but not one in keeping with a normative ideal (however such a norm might be arrived at). An

arrhythmic heartbeat does not conform to the ideal for sustaining health. An arrhythmic traffic flow does not conform to the ideal of free movement through a city's arteries. An arrhythmic pattern of bank withdrawals does not conform to the ideal of a stable banking system. But arrhythmia is not the *absence* of rhythm.

The distinction of eurhythmia and arrhythmia is analytically useful when considering fortified and exposed schools. It introduces the idea of conformity or deviation from an ideal, but does not suggest the origins of deviation where present. Eurhythmia/arrhythmia holds difference without blame in a similar manner to the distinction of fortified/exposed.

2.3.3.3 Dressage

How individual bodies and agents come to subscribe to, and reinforce, rhythm is attributed to what Lefebvre calls *dressage*. He describes dressage as originating in military practices, but now extending to many levels and practices of society where habituated, embodied and learned social rhythms are so familiar as to seem 'natural':

The sciences of dressage take account of many aspects and elements: duration, harshness, punishments and rewards. Thus rhythms compose themselves.

(Lefebvre, 2004, p.48)

Based on repetition, dressage conditions the body and its movements to ideal norms and 'produces' the body of the dressaged person. The rhythms of the body produced by dressage become almost invisible when normalised and "determines the majority of rhythms." (Lefebvre, 2004, p.49).

Dressage and habitus

Lefebvre's notion of dressage and Bourdieu's concept of habitus share much in common. Both seem natural and given, and their origins are forgotten so as to eclipse memory of alternatives. But while dressage produces the body, it is blind conditioning: sitting upright at the school desk, moving quickly between classes, shaking hands on greeting, establishing or avoiding eye contact... these are examples of how bodies are produced by social conventions posited as 'respectful' or 'necessary'. Habitus *includes* the bodily hexis produced by dressage, but habitus is more—it also includes the mental schemas of the world, about how to act and react: a logic of practice which enables its bearer to navigate familiar fields and causes alienation in unfamiliar ones. Habitus and dressage are related then, in the body, but habitus is not reducible to dressage.

2.4 Rhythm and non-determined regularity: a common motif

Bourdieu and Lefebvre's theories of practice share much in common. Both are premised on dialectical construction between subject and society. Both take a non-Hegelian view of dialectics, where triadic framings (Lefebvre 1991, 2004, 2014; Bourdieu 1977; 1990; 2000) of the social do not resolve into a synthesis, but keep alive the possibility of change should the tenuous balance between structure, meaning and activity be thrown off kilter. Both dismiss 'high philosophy' and supposedly objective science as being incapable of theorizing social reality and its complexities, and espouse the practical and everyday as the site of real social research.

Both also foreground the body as the site of the physical made social and vice versa, through concepts of dressage, bodily rhythms, bodily hexis, habitus and embodied social capital. Both describe domination of a field of practice as a subgroup's control over representations of reality, and the sleight of hand involved in suggesting that a dominant group's preferred representation *is* reality. But perhaps most relevant for this thesis, both posit a dialectical rhythmic ontology as fundamental to understanding social practice. For Bourdieu and Lefebvre both, the social world is constituted of rhythms—physical, biological and social—in uneasy equilibrium with each other, or at odds with each other in moments of rupture.

In *An Outline of a Theory of Practice* (1977) in which Bourdieu examined the Kabyle house as a case for his general theory, he stated that through the...

dialectical relationship between the body and a structured organization of space and time ... common practices and representations are determined. (Bourdieu, 1977, p.89)

Later, in his refined version of that work (1990), regularity took front and centre stage: that is, repetition and difference, periodicity without mechanical precision. In Lefebvre's terms: rhythm.

Everywhere where there is interaction between a place, a time and an expenditure of energy, there is **rhythm**.

(Lefebvre, 2004, p.25)

For both theorists, rhythm in dialectical relations with other rhythms shape social practices.

There is neither separation nor an abyss between so-called material bodies, living bodies, social bodies and representations, ideologies, traditions, projects and utopias. They are all composed of (reciprocally influential) rhythms in interaction.

(Lefebvre, 2004, p. 51)

Finally, both theorists place significant value on the pre-conscious i.e. activity before mental representation of activity. A critical shared element of their work was the presence of strategy without conscious strategizing (Lefebvre, 2014; Bourdieu, 1990, 2000). Rhythms ebb and flow in accordance with interest, but rarely is any one agent explicitly and consciously in the driving seat.

2.4.1 A word on reach

Just as dressage is influential but not totalizing on the possibility of rupture and impulse, the effects and influence of policies and official representations do not totalise everyday life in schools. Policy is a representation of ideal practice, underpinned by ideal (and ideological) norms of timespace-conceived which—in Lefebvrian terms—can approximate but never be identical to reality.

As mentioned above, Bourdieu described policies as ‘officialization strategies’ whose efficacy was a function of the strength of position for those dominant in the macro-field of political and economic power:

Strategies aimed at producing ‘regular’ practices are one category, among others, of *officialising strategies*, the object of which is to transmute ‘egoistic’, private, particular interests (notions defineable only within the relationship between a social unit and the encompassing social unit at a high level) into disinterested, collective publicly avowable, legitimate interests. In the absence of political institutions endowed with an effective monopoly of legitimate violence, political action proper can be exercised only by the effect of officialization and thus presupposes the *competence* (in the sense of a *capacity socially recognised in a public authority*) required in order to manipulate the collective definition of the situation in such a way as to bring it closer to the official definition of the situation and thereby win the means of mobilizing the largest possible group...

(Bourdieu, 1977, p.40, original emphasis)

The ‘socially recognised capacity’ Bourdieu describes in this quote speaks directly to the concept of *reach* alluded to in Chapter One. The greater the competence of a public authority, the greater its reach i.e. its *influence* through timespace-conceived into timespace-lived. The more power the official representation wields, the stronger the rhythm of that representation (i.e. policy) and the more influence it exerts on other, potentially antagonistic, rhythms.

The ideal rhythm of the official representation does not totalize timespace or practice, even if it would like to: its influence is not guaranteed. The degree to which policy influences or superimposes (by virtue of its competence) is what this study terms *reach* (Jacklin, 2004a).

Many policies in the South African education system do not reach, or only reach partially. E.g. the Language in Education Policy (Department of Education, 1997) has a very weak reach and has largely gone ignored for almost 25 years of democracy; the policy regarding the abolition of corporal punishment (Republic of South Africa, 1997) has also gone unheeded in many schools across the country.

But policies that avail timetable inputs *do* reach, since schools cannot avoid the limitations imposed by the economic capital available to them, nor the cultural capital they must produce to 'play the game of schooling'. Policies regulating and distributing the forms of capital regarding who teaches whom, what, with what and where reach into schools (differentially). These strands are refined in more detail in Chapter Four in the analytic framework.

2.5 Conclusion

This chapter has brought together categories and concepts from the oeuvres of Bourdieu and Lefebvre for use for this study. Bourdieu's triad of habitus, capitals and field were further textured with some of his less well-used concepts of *skholé*, *illusio* and *doxa*. Two related components of Lefebvre's work were developed: his timespace triad of conceived, lived and perceived, and his typology of rhythms (including his concept of *dressage*).

Both theorists were argued to have the roots of their work in rhythms (although Bourdieu referred to these as regularities). The concept of reach was developed further as the degree of influence that policy could exert on everyday activity in schools.

The toolbox developed provides a rich set of concepts for discussing schooling practice, the reproduction of fortified or exposedness for schools, as well as how these might relate to timetables, forms of capital, policies that reach, and rhythms of teaching and learning. The next chapter now examines what literature already exists that examine timetables and rhythms in schools, and timespace in schools more broadly.

3.

Literature review

3.1 Introduction

The previous two chapters have identified the problematic of this study, as well as the conceptual tools with which this problematic will be approached. This chapter now locates the study against existing literature about school timetables and their relations to schooling inequalities and education policy.

The literature regarding timetables and their relation to schooling inequalities is almost non-existent; writing about timetables is thin, as is the literature about schools and rhythms of teaching and learning. In contrast, the literature regarding schooling inequalities in more general terms is extremely broad and far beyond the scope of a single PhD thesis to review. Striking an appropriate depth and breadth of literature to examine *for* the study (as opposed to a systematic and substantive literature review *of* any of these topics—Maxwell, 2006) thus proved challenging.

This literature review unfolds as follows. First, a brief sketch of South African research about policy and its relation to inequality is given—this is by necessity not an exhaustive review of a large corpus of literature. Thereafter a sample of literature regarding school time and school space is explored, although both are also areas of investigation too large to comprehensively examine. Rather, key framings of time and/or space in schools are sketched for the reader as background for the more focused section that follows.

The chapter then turns to review existing work on schooling and timespace in the South African case, followed by a more comprehensive review on the few articles and texts that investigate school *rhythms* and the slim existing literature regarding timetables. In doing this, the account presented in this study of how timetables and rhythms relate to schooling inequality is located against other explanations and research.

3.2 Debates on South African education inequality outside of timespace: contesting theories of change

There is strong consensus that the status quo of inequality and poor education opportunities in South Africa is socially and economically deleterious and unsustainable. What is not agreed upon is how this inequality is reproduced, what is to be done about it, and the role of policy in this. Existing studies of South African education policy and change posit a broad field of framings and theories of change across both school effectiveness and school improvement traditions.

There are powerful voices in this field that propose the problems reside with some aspect of the teaching workforce, including: teacher content knowledge and training (e.g. Taylor and Vinjevoold, 1999; Muller, Taylor and Vinjevoold, 2003; Spaul, 2015; Fleisch, 2008; van der Berg et. al. 2011), school management and leadership (e.g. Levy et. al., 2018; Taylor, 2011) or teacher absence and strong teacher unions (e.g. Maphosa et. al., 2012). Most of these voices originate from school effectiveness approaches and tend to describe schools a-contextually (Motala, 2001). Shalem (2003) problematizes such framings as lacking a viable theory of change as to *why* such issues exhibit strong correlations with socio-economic context and exposedness, and what is to be done beyond constructing deficit discourses about teachers who lack meaningful opportunities to change.

Concerns about teacher readiness and efficacy arose against the backdrop of drastic changes in curriculum demands on teachers post democracy (Jansen & Christie, 1999), with the promulgation of a new outcomes-based curriculum called C2005, later revised to the Revised National Curriculum Statement (RNCS), now abolished in favour of CAPS since 2013. Opinions varied regarding whether the problem lay with teachers' skills, with the curriculum design, or in the relation between the two. What was not in doubt was that bold curriculum changes post 1994 had been an abject failure, and capacity in exposed schools to implement an open ended, poorly defined curriculum played a role (Jansen & Christie, 1999; Gilmour & Soudien, 2009; Kallaway, 2009; Christie, 2013).

Many scholars have attempted to understand poor schooling performance *in conversation with* the complexities of historical inequity, tensions between forces at global and local levels, and what schools do every day. Such research ranges across similar topics but with significantly different framings. Some examples include: De Clercq (2008, 2013), who explored the role of notions of teacher professionalism and accountability as a mode of improving teaching and learning; Ngcobo and Tikly (2010), who locate notions of 'leadership' and 'management' in schools' contexts to trouble new managerialist framings of school leadership practice; the multiple writings of Christie, ranging across historical policy framings (e.g. 2008), management and leadership (1998), and schooling spatialities (2016); and authors such as Motala (2005, 2009), Badat & Sayed (2014), Soudien (2004) and others, who have foregrounded structural and/or contextual constraints on change. Some have explored what meaningful opportunities for teacher development might look like (Graven, 2005; Adler and Reed, 2002; Adler et. al., 2009), and yet others describe how socio-economic factors accumulate in the classroom to the point of overwhelming curriculum intentions and teacher capacity (e.g. Lewin, 2007; Schollar, 2018).

Few of these accounts attempt to relate what teachers and school leaders *do* in their everyday work to their material realities. There still exists a strong correlation between

geographical location, income obtained through private supplementation in the form of school fees (and concomitantly, teacher-to-student ratios) and school performance on the National Senior Certificate exams (Pienaar and McKay, 2014). What is not yet well understood is the mechanism of translation between resourcing and results. There is a broad literature regarding the relevance of resources on schooling, with deeply divided opinions. This study notes the strong correlation between resourcing and schooling outcomes, while still holding in view that resources do not determine schooling results (for more on the resource-relevance debate, see Hanushek (1997, 2006), Carnoy (2008), Carnoy et. al. (2016), Jackson (2015) and Krueger (2003).

The mechanisms of translation, interpretation and enactment between policy (including, but not limited to, resourcing policy) and what happens in schools is plural and complex. In the words of Jansen:

Rich accounts of policy reform (see Hargreaves et. al. 1998) over a century of effort have put paid to the idea of searching for fidelity between policy and practice. Nevertheless, the room to manoeuvre in policy reform is substantially constrained by the extent to which material resources are available to educational planners.

(Jansen, 2001, p.288)

What Jansen foregrounds is that while resources are not a sufficient prerequisite for change, they impose very real constraints *on* change. But how? This study suggests that such constraints operate through schools' rhythms of teaching and learning, and that the timetable is the primary policy-constrained arbiter of these rhythms.

The next section explores a sample of literature on time and space in schools as a backdrop to what has been researched on rhythms and timetables, sketching how timespace has been framed in school research.

3.3 Schools and timespace

Having briefly outlined the terrain of schooling inequality studies in South Africa, literature regarding school timespace is now reviewed. Almost all the studies examined focused solely on time in schools or space in schools to the exclusion of the other. For clarity, these will each be discussed separately—where studies take cognizance of both space and time together, this is noted.

The discussion of timespace in schools is loosely grouped into studies on time and/or space, with variation along different axes. Some studies are conceptual or methodological contributions to thinking about timespace and schooling, while others are empirical in nature. The object(s) of focus range from the minutiae of everyday life in schools to

considerations of policy on time and/or space at a macro level. Critical perspectives, positivist approaches (which treat timespace as inert and a priori) and subjective experiences of timespace are all represented in the selection. These lines of distinction (method, focus and framing) are lifted out as the readings are explored.

3.3.1 Space in schools

3.3.1.1 Critical conceptions of space and schooling

The 'spatial turn' in critical education research (Massey, 1992) has produced a large corpus of studies examining spatiality in schooling. Most of this work draws on Lefebvre (although not all of it productively). Ferrare and Apple (2010) note that

spatial analysis ... when done well, is capable of casting new light on existing problematics within multiple critical education projects (exposing) social relations that have often been taken for granted or ignored altogether by critical education analysts. This ... **has become increasingly salient as education policy and practice is stretched into new spaces via neo-liberal globalization processes, as well as those taken-for-granted relations operating at the micro level of the school, classroom, corridors and curriculum.**

(ibid., p.210, my emphasis).

But Ferrare and Apple warn against the adoption of spatial lenses for novelty's sake, drawing on Gulson and Symes' (2007) explicit caution against falling into the trap of space-as-metaphor. Critical spatial analysis (when carefully deployed) is posited by Gulson and Symes as a resistance strategy against what they term the 'quantitative revolution' that sought to downplay the relations between the spatial and the social. In particular, they reasoned, a critical spatial lens holds promise for education *policy* studies:

Drawing on theories of space contributes in critically important ways to subtle and more sophisticated understandings of the competing rationalities underlying educational policy change, social inequality and cultural practices.

(Gulson and Symes, 2007, p.98)

McGregor also foregrounds the discursive work done by ignoring space or assuming space as inert. She actively identifies such framings as a site of contestation between contextual and a-contextual theories of schooling practice and change:

The silences around space allow it to be organised to produce and reproduce practices which maintain persistent and unequal power relations... space hides things from us, through our lack of understanding of it as constructed and contestable.

(McGregor, 2004a, p.13)

Arguably it is the view of schools as discrete spatial and temporal islands, isolated from 'the outside world' **that contributes to a culture of blame, where wider socioeconomic and political problems are able to be recast as school, or even pupil problems** (Nespor, 2002).

(McGregor, 2004b, p.4)

Such framings resist...

...the 'hegemony of school effectiveness'... (a) body of work (which) has arguably dealt with decontextualized school effects and structures, rendering local conditions and the lives of teachers, students and the community invisible and social and political conditions apparently irrelevant.

(McGregor, 2003, p.369)

Reanimating the spatial and its relation to the social holds promise then for countering reductive positivist/technocratic approaches to understanding schools.

3.3.1.2 Empirical studies of school space

Critical attention to space in schools is not only productive when used on policy or when theorising about schooling, but also as a focusing lens on empirical work at the level of the school. As McGregor states (2004b, p.3), "power relations are inscribed into the buildings and material practices of the school". The imbrication of space with power and social relations manifests clearly at the level of the classroom: in how teachers manipulate room layout and objects towards control and discipline (McGregor, 2004a); in how storage capacities and objects are available and produce or reify practices and habits, whether for direct teaching or administrative work (Bissell, 2004); in how inter-staff power relations play out in staffroom design and usage (Paechter, 2004); and even in the hidden curriculum of space itself as it conditions, moulds and shapes flows of bodies and objects, producing subjectivities and rhythms around the school (Watkins, 2017).

The few studies that explicitly discuss schools, space and schooling policy were mostly from the South African literature—these are discussed in more detail under "South African research on time and space".

But most of the studies on school space identified focused solely on the spatial without considering the temporal. McGregor noted that "(s)pace in schools is perhaps most obviously articulated through **time, as displayed by the timetable which distributes bodies, resources and curriculum**" (McGregor, 2004b, p.3, my emphasis). The next section examines a slice of studies on school *time*, before then exploring South African literature on school timespace, followed by rhythms and then timetables.

3.3.2 Time in schools

The literature on time and schooling can be broadly divided into three sub-categories. The first includes theoretical writings on time and schooling and/or learning. The second broadly deals with school effectiveness research, which examines issues such as time on task and “opportunity to learn” (OTL). Thirdly and finally, there exists a motley literature of qualitative empirical studies that examine time as a feature of school organisation and practice.

3.3.2.1 Theorising time in schools

Multiple theorists have argued that the tight monochronic clock-time of schools has its roots in the industrial origins of modern, institutionalized schooling (Adam, 1990, 1999; Foucault, 1977; Ball et. al., 1984), and that the discursive dominance of time conceived in this manner is related to shifts in the modes of production in western—and then globalised—political economy (Thompson, 1967; Harvey, 1989; Moran, 2015).

Schools also serve as a site of dressage and reproduction for a particular modern-capitalist conception of time. This conception frames time as a commodity, not to be ‘wasted’ or ‘spent’ unwisely, to be hyper-structured into lessons with bells and timetables, terms and grades, linearly ‘marching’ towards the illusio of schooling. Schooling time—conceived in this manner—almost obliterates the natural and organic cyclical time of the seasons and the body, but still contains sufficient repetition so as to habituate. Adam describes such temporal discourse as part of modern schools’ hidden curriculum:

While such time discipline forms a mostly unquestioned dimension of adult existence, for children it constitutes one of a number of hidden curricula. For them, school is the place where the Puritan, utilitarian approach to time is absorbed and internalised... In western societies we have imposed the monastic schedule on ourselves, our children and their educators... we have adopted this reified, abstracted time and its rationalised control as an educational strategy. In the 6th century, when the Benedictine monks first introduced fixed and pre-set times for each of their activities, this was a revolutionary practice. Today it is neither questioned as a practice nor doubted as a principle: it is simply taken for granted. It has become the inescapable reality for 20th century western education.

(Adam, 1999, p.107-108)

Biesta suggests that such approaches to time are fundamentally antithetical to the non-deterministic, free activity that is real learning (Biesta, 2013a, 2013b), outlining that education systems structured in this manner will “get the world into our children and students”... but fail to “help our children and students to engage with, and thus come into, the world” (2013a, p.5). Although coming from a different philosophical tradition, White

(2016) extends Biesta's concern, noting that schools can never encompass all the learning required for a 'good' life, and that 'time-poverty' outside of schools is hence a hindrance to non-institutionalized forms of learning and education.

But while, analytically, school time can be described as 'monochronic', 'rationalist' or 'free', such ideals do not conform to the pluralist temporal realities of schools as complex sites of social practice. Rules that intend clock-work conformity might coexist side-by-side in uneasy antagonisms and alliances with event-driven, open-ended pedagogy over the school space and day. Analyses of schooling time must be able to hold this complexity. Lingard and Thompson (2017) argue that the sociology of time in education requires a definition of time that "is both multiple and dynamic" since...

(our) sense of time frames our understandings and actions, our institutions and their organisation, our engagement with technologies, our explanations of the past and our present sense of purpose, and our individual and collective imagination for the future.

(ibid., p.1)

Lingard and Thompson's ambition is to restore time and space to equal footing in education sociology: they attempt to right the balance of a research trajectory that—having historically long privileged the temporal at the expense of the spatial (e.g. Adam, 1990, 1999)—took a lurch towards space at the expense of time with the so-called 'spatial turn' (Massey, 1992).

However, plural and complex conceptualisations of time do not dominate studies on school time, most of which assume neutral, monochronic clock-time as inert and universal. This is particularly the case with the literature regarding 'time on task' in schools.

3.3.2.2 Time on task and 'opportunity to learn'

Much of the literature about instructional time originates from the school effectiveness tradition, wherein time is considered an inert, inelastic and decontextualized commodity to optimise for schooling outcomes (e.g. Hanushek, 2015). The primary assumption in this scholarly quarter is that more time-on-task, or opportunity to learn (OTL), increases learning outcomes, an assumption that does not bear out empirically when stretched across deep inequality (Cattaneo et. al., 2017; Benavot, 2004; Wahlberg, 1988). In a report for UNESCO, Benavot (2004) found that Sub-Saharan African countries often have *more* timetabled hours for school than their higher achieving first world counterparts, with South Africa's scheduled contact time being at the higher end even of the Sub-Saharan Africa range.

Such evidence debunks the naïve assumption that throwing more time at lessons improves teaching and learning a-contextually, primarily since such approaches consider an hour as uniform across all contexts and ignore the qualities of what time *means* and its affordances in given constraints and moments. Even when considered on school effectiveness techniques' own terms, "the independent learning effects of increased time may be overstated" (Benavot and Gad, 2004, p.292) when other confounding variables such as language, socioeconomic status and school readiness are taken into account. As Benavot and Gad (2004) note, understanding the complex effects of multiple in- and out-of-school factors on contact time is difficult to disentangle in deeply exposed schooling conditions. School effectiveness research approaches that conflate timespace-*conceived* (i.e. statistical models and clock hours) for timespace-*lived* (i.e. practice) are fated to struggle to conceptualize such complexities and—in doing so—miss potential theories of change.

3.3.2.3 Time and school change: empirical research

This study focuses on time in schools as it manifests in the relation between policy and whole school rhythms. It hence did not examine classroom-based studies that focused on the temporality of pedagogic activity explicitly. Having said which, pedagogic activity and systems level concerns are not so easily distinguished, since the timespace produced at the level of system and school necessarily holds a dialogic relationship with the timespace of the classroom. However, in the interests of scope delineation, this review will remain limited to studies that focus on time and school reform, inequality reduction, and how school time is imagined in policy.

Time in schools seems to have become of increasing interest to education scholars since neoliberal foci on efficiency began to grow in the mid-1990s. Abdal-Haqq (1996) summarises reports from that period about the changing nature of teachers' work and the absence of opportunities (due to 'time scarcity') for professional development. Lack of time for teachers to develop the new skills they require in the face of change is also a concern echoed by Ritchie and Crawford (2009). Regular, ring-fenced time for teacher collective professional development was identified by Darling-Hammond and McLaughlin (2003) as a critical policy intervention if professional development was to be supported and sustained amidst rapid complex school reform.

However, Wood (2019) reframes the teacher workload debate as about more than just counting work hours or 'time scarcity':

(I)n organizational contexts where time is only understood in hours and minutes it rapidly becomes a proxy measure for cost rather than being valued as time in its own right; when leaders and managers begin to discuss issues relating to time they are generally discussing cost.

Therefore, cost inevitably leads to discussion of efficiency and how to make the most out of any unit of time available.

...

Because clock-time and efficiency become central to organizational work, the amount of work required in any single hour begins to increase... If the government and other associated bodies such as trade unions, government agencies and think-tanks see teacher workload as merely a problem in clock-time, then any attempt to rectify and ameliorate the problems which are so acute within the system will inevitably fail.

(Wood, 2019, p.1-2)

Counting minutes, then, as a mode of time management in schools (as is common in school effectiveness literature and new managerialist approaches to reform) is of concern to Wood, since it erases the realities of teachers' real work. Wood cites several examples of work intensification (i.e. expecting more work per unit of clock-time) and the concomitant—often counter-productive—results, including: health impairment and issues with motivation (Paškván et. al. 2016); psychosomatic issues (Franke 2015) as well as teachers entering a 'survival mode' (Omari and Paull, 2015), all of which have been documented in the South African case in exposed schools (see Chisholm et. al., 2005; Christie et. al., 2007; Christie, 1998; Reddy et. al., 2010). Rather, Wood argues, *rhythms* provide a more nuanced frame for understanding and managing schools, where relative periods of intensity can be counterbalanced and understood in chorus with 'down-time' (see "Rhythms in schools" later in this chapter).

Reforms of schools, and the work of teachers, are never neutral—reforms that explicitly or implicitly shape timespace are then necessarily political. Thompson and Cook (2017)'s empirical investigation of timespace as a form of control and discipline in schools suggests that teachers' sense of time scarcity and a-synchronicity are not accidental, but critical to understanding the imbrication of timespace and power. Drawing on Foucault and Deleuze, they reason that "the question of the productive use of clock-time within disciplinary institutions had a concrete relation to the body in space... with clock-watching and self-watching as two faces of the same time" (ibid., p.30), what they term a 'chrono-political assemblage'. Similarly, Orellana and Thorne (1998) examine the power plays involved in contesting school time in the form of the yearly school calendar in their examination of multi-track Los Angeles schools, and the effects of these reforms on the everyday lives of the children and parents attending. That study also foregrounded the interconnectivity of time and space in schools where multi-tracking, platooning (shift schooling) and expanding the school academic year are offered as temporal solutions to shortages of school *space* and concomitant over-crowding (Orellana & Thorne, 1998).

While a comprehensive review of studies on schooling and time is far beyond the scope of this discussion, what has emerged is a contestation between rationalist frames of schooling time (as enshrined in school effectiveness studies and time-on-task measures) and alternative perspectives that foreground complexity and erasure when time is framed in monochronic terms. Conceptions of 'change', 'learning', 'progress' and 'development' in schools are all too easily founded on simplified linear notions of monochronic time and the rationalist policies that necessarily arise from such grounds—along with their hidden power structures (Biesta, 2013b). Since this study takes the position that timespace-conceived—and its relation to practice—is non-neutral, such hidden power structures are of interest, particularly in how they relate to policy.

3.3.2.4 Schooling policy and time

The relation of time(space) to policy was stated by Lefebvre as falling firmly into the realm of timespace-conceived (see Chapter 2). But what kinds of time ideals and discursive framings do school policies enshrine, represent and reproduce? Recognising that policies are more than just texts (Ball, 1993) but sites of contestation over how society is imagined, how is society thus imagined with/in time(space)?

A plethora of both empirical and conceptual research exists regarding time and policy in general. Policy cannot, in fact, be considered a-temporally (or a-spatially), given how policy is imbricated with (normative) questions of change (Taylor et. al., 1997), and change cannot be conceptualised outside of time. Fitzpatrick (2004) outlines the centrality of the question of time not only for policy formation, but for questions of democracy and emancipation, stating that

(A) society's claim to be free is diminished whenever time is not at or near the top of its list of priorities, for without adequate temporal space¹³ (sic) to act, interact, speak and think, all other rights... are correspondingly weakened.

(ibid., p.198)

Fitzpatrick (2004) details the necessity of monochronic, inert timespace-conceived as politically hegemonic under capitalist modes of production, since without such standardization, the commodification of time and space is not possible (see also Thompson, 1967). By foregrounding the non-neutrality of capitalist time ideals, then, issues such as 'time autonomy', 'time sovereignty' and 'time domination' (detailed by Schwartz 1974, 1978 as well as Fitzpatrick, 2004 and others) become visible as necessary facets of social

¹³ Fitzpatrick's use of the word 'space' metaphorically here is ironic, but not uncommon.

power. However, while Fitzpatrick and others propose 'meaningful time' as the political counter to hegemonic, monochronic time, a potent and convincing definition of 'meaningful time' is not offered, nor is sufficient justification provided for policy as *the* mechanism for producing 'meaningful time'. What an 'explicit politics of time' might look like, to coin Colley et. al.'s phrase (2012), is still uncertain.

Although not explicitly about schooling policy, Fitzpatrick's point stands: policy is shot through with discursive ideals of time(space), and such ideals sustain power relations (Carter, 2016). Schools are not exempt from such discursive policy issues, and the more education policy becomes quantified and embroiled in evidence-based technicism by aping supposedly objective scientific epistemes (Lingard, 2011; du Toit, 2012; Ball, 2015) the more embedded rationalist monochronic time becomes in schooling imaginaries. South African education policy is no exception, as is discussed in more detail in Chapter Six. The next section details the literature available on school time and school space in the South African context.

3.3.3 South African research on time and space in schools

Several studies have examined either time and/or space in South African schools.

3.3.3.1 Studies on time and schools in South Africa

Two particular reports focus on time in South African schools, albeit not timetables. Chisholm et. al. (2005), in a report entitled "Educator Workload in South Africa" compiled for the Education Labour Relations Council, surveyed 900 schools across South Africa to establish teacher workload as framed in terms of instructional time, overall time and work intensity. Feedback from teachers indicated that more than three quarters felt their workload had intensified since 2000, citing factors such as rapid policy change, increased paperwork and administration, curriculum proliferation, insufficient classrooms, large classes, and the mainstreaming of students with learning barriers into ordinary schools. In particular, the complexity and instability of teaching work was seen as problematic, where teachers had to play multiple roles simultaneously to too many people:

The major casualty of policy overload and class size is the time that educators are able to devote to their core work, teaching. Only with great effort and at great personal cost are a small minority of educators able to meet all the requirements of them and continue to be able to dedicate the time required to teaching.

(Chisholm et. al., 2005, p.x)

According to the report, more than half of teachers' time is taken up with work that is not actual instruction. In particular, assessment, management, and supervision crowd out

teaching, with findings suggesting that teachers who run larger classes are overwhelmed by the administrative and assessment load such classes necessitate. Chisholm et. al. also note the irony that paperwork and administrative tasks intended to *ensure* teaching and learning take place in fact *displace* teaching and learning and erode instructional time. A lack of non-teaching administrative staff is also identified as problematic for schools.

While Chisholm et. al.'s report points towards some of the systemic issues in how timespace plays out in South African schools, it still focuses on a relatively narrow metricized notion of 'instructional time' as measured by hours of teaching, and does not address the *qualities* of time in schools, or the roots of this in schooling rhythms and practices. That is: the focus on timespace-conceived and counting work hours necessarily excluded other aspects of timespace-lived and -perceived. This bracketing out of non-quantified forms of practice is suggested in the gap Chisholm et. al. identify between teachers' perceptions of their workload and their reported hours of work (41 hours a week). The report suggests that "demands on educators are so extreme that the overall effect is for work to be less well managed and less effectively done than it could be." (ibid., p.xiii), Such seeming contradictions between quantifiable work hours and teachers' perceptions of their workload might be accounted for in the nature of the work teachers are faced with, how dissonant the rhythms of schools are, and the concomitant psycho-politics (Christie, 1998) that working under extreme stress could induce. The report also does not explicitly spatialize schooling temporalities, although shortages of space are noted as barriers to teaching and learning.

A second report related to time in South African schools is the "Investigation into Educator Leave in the South African Ordinary Public Schooling system" (Reddy et. al., 2010). Staff absence is often anecdotally cited as a major barrier to improving learning outcomes (see Maphosa et. al. (2012) for an example): Reddy et. al.'s report provides one of the few rigorous empirical analyses of educator leave in South Africa.

Trends in educator leave in South African ordinary public schools, according to Reddy et. al., are on par with leave rates in similar socio-economic circumstances elsewhere. Unsurprisingly, leave rates in high income schools (and high income countries) are lower than in their poorer counterparts. Of interest for this study is Reddy et. al.'s estimate that approximately 20-25% of staff absence from school and the classroom is attributable to official duties, further confirming Christie et. al. (2007) and Chisholm et. al. (2005)'s findings that instructional time is being crowded out by other competing demands on teachers' attention (a finding also recently repeated in the OECD TALIS Report 2019). Reddy et. al. note further the...

...negative impact is higher in smaller and more under-resourced schools, thereby further disadvantaging the learners who most need quality schooling to escape the poverty trap.

(ibid., p.x)

...suggesting that schools that cannot protect their teaching and learning time against other demands reproduce disadvantage (a finding which is further supported by the analysis in this study—see Chapters Six to Eight).

While Reddy et. al. also rely on quantitative analysis of systemic absence data (and hence count monochronic time without a concomitant analysis of the qualities of school time), the report cites Olivier and Venter (2003)'s work on reasons for teacher absence in an area of Western Cape where this study was conducted. Olivier and Venter's research adds texture to the qualities and conditions of timespace in exposed schools where they polled teachers. They found that stress and burn-out resulted in high staff turnover, and that teachers experienced significant mental and physical health issues as a consequence of their working conditions. Of all the potential stressor groups that Olivier and Venter's data gathered in their survey, lack of time was cited as highest, particularly since teaching work spilled over into personal time. What both Olivier and Venter, and Reddy et. al.'s, research suggests is that absence from class and the subsequent effects on school contact time is a function of timespace-lived and -perceived in South African schools, and cannot be decontextualized and attributed to single factors such as agency or attitude.

Contextualization must take into account the quantities and qualities of space in schools. The next section discusses some South African literature on schooling space.

3.3.3.2 Studies on space and schools in South Africa

Some of the earliest work on schooling space can be found in unpublished dissertations and reports from the apartheid era. Jacklin (1991) examines the relationship between school provision policy and school space in the former PWV area (now Gauteng) under the then Department of Education and Training tasked with education for people categorized as 'Black African' living in urban and peri-urban settlements. Jacklin and Graaff (1994) remains the most comprehensive report on rural education in what were then termed Bantustans¹⁴, and details not only the absence of systemic support for school infrastructure provision, but the local *spatial* politics that emerged as a result of this lack

¹⁴ The term 'Bantustan' is a pejorative referent for the supposedly 'autonomous' 13% of South African territory set aside for the Black population by the apartheid government in what were euphemistically called 'homelands'. See Jacklin & Graaff (1994) for more detail.

of provision. Both studies provide historical insights into the long arc of spatial inequality along lines of race, class and geography in education provision in South Africa.

Since democratic elections in 1994, other researchers have begun to explicitly focus on how South African schools are spatialised and the role space plays in reproducing or disrupting historical inequities. Christie (2013) deploys Lefebvrian concepts of space and rhythm (see "Rhythm in schools") to argue for space as a critical juncture for South African education sociologists concerned with social justice, given the spatial history in both apartheid and coloniality that persists into present day inequalities.

Several studies on schools and space in South Africa focus on the subjective experience *of* and subjectification *through* school space. Karlsson (2004a, 2004b) explores how White subjectivities were produced by the architectures and policed boundaries of schools for Whites during apartheid (2004b), as well as how formerly Whites-only schools are navigating change post-apartheid (2004a) and how these changes in subjectivity are reflected in school spaces. Conversely, Fataar (2007, 2009) explores the spatialised subjectivities of students from other racial backgrounds and how they relate their own desires discursively to the perceived 'lower quality' of local township schools as compared to suburban and inner-city counterparts. Fataar's work posits student mobility as both resistive of, and yet reifying, narrow racialised identities and their spatial manifestations in apartheid legacy urban planning. Hunter (2010, 2015, 2016) has done similar work in the KwaZulu-Natal province, charting the relations between class, race and student mobility across schooling spaces. However, neither Fataar nor Hunter relate the macro-movement of students through urban South African cities to the everyday activities of schools and their rhythms of teaching and learning.

One particular study on South African schools and timespace is the Ministerial Report on Schools That Work (Christie, Butler and Potterton, 2007). This report warrants more detailed discussion in how it locates the other theories of change discussed previously to schools' 'use' of time and space to interrupt cycles of disadvantage in exposed contexts.

3.3.3.3 The Schools That Work report

The Ministerial Report on Schools That Work describes the practices of 18 schools that produced higher summative exam results than their counterparts of equal socio-economic circumstances. While strategies for overcoming challenges varied across the 18 schools studied, some commonalities shone through. Every school investigated expanded instructional time through weekend classes, evening classes, 'Winter Schools', 'September Schools' and holiday lessons, especially for higher grades as they approached summative exams. All these extra lessons were done out of staff's own private time. Christie et. al.

note, however, that 'throwing extra time at the problem' did not necessarily mean that time was 'well used', or that the extra contact time deepened engagement with curriculum. Only one school suggested that the normal scheduled contact time was sufficient for curriculum coverage if 'well managed' (ibid., p.54) suggesting that structurally, the alignment between school contact hours and curriculum volume might be of concern.

The report also makes mention of spatial challenges in schools, noting poor or absent infrastructure as significant barriers to teaching and learning, and school operations:

(i)n many cases classrooms were in poor condition (e.g. broken ceilings and windows)... . One principal reported that the school was used by ABET classes in the evenings and "things disappear". Many classrooms were physically too small to accommodate senior learners—more than 60 learners, sitting four at a desk, crowded into rooms in a way that the teacher could not circulate.

(Christie et. al., 2007, p.68)

The Schools that Work report brings together many of the systematic challenges that South African schools face in a succinct and comprehensive manner. However, it still omits timetables, as well as rhythms of teaching and learning, as specific aspects of schooling arrangements and practices.

3.4 Rhythms in schools

Having sketched key lines of discussion about time/space and schools, and delved a little deeper into the South African literature, the next section discusses what studies were found on schools and *rhythms*.

Social practices in general, and in organizations in particular, have been recognised as rhythmic (Schatzki 2010; Johnsson, 2012; Blue, 2017; Adam 1990). What little work on education rhythms exists has not particularly focused on secondary school systems, timetables or policy. Almost all the anglophone studies found on rhythms in school are not sociological, and mainly pertain to the relationships of biological/circadian rhythms in children to their schooling performance (e.g. Klein, 2004; Schmidt et. al., 2007) with a few exceptions that examined reading rhythms in relation to language and literacy (e.g. Cowley, 1994). Certainly there is a paucity of research on the rhythms of schools in the anglophone canon where most writings focusing on the time *or* space of schooling, although a significant corpus of work on schooling rhythms is present in French (see Alhadeff-Jones, 2017) and German (see Mathisen, 2015).

Both Alhadeff-Jones and Mathisen explore education and rhythms with a view to emancipatory practices: the former offering empirical insights and the latter a conceptual

analysis. Recent English work by Alhadeff-Jones (2017, 2019) examines rhythms of learning in higher education and adult education with a view to identifying and supporting emancipatory pedagogies in his postgraduate classes at a university in the United States (although at times Alhadeff-Jones inadvertently reduces rhythm to only the temporal).

Mathisen (2015, 2016), on the other hand, offers a conceptual contribution, contrasting Lefebvre's rhythmanalysis with that of Alfred Whitehead and Rudolf Steiner to theorize emancipatory schooling in the abstract. Responding to Biesta's (2013a) concerns regarding the limitations monochronic time places on genuinely emancipatory education, he proffers rhythmic interventions as an alternative to Biesta's 'suspension of time'. Mathisen argues that, for Lefebvre, "(t)o create eurhythmic timetables, lessons, ways of interaction and power relations at school can be envisioned as pedagogically sound rhythmanalytical interventions." (2015, p.40). He describes schools as intense sites of contestation between "(e)xternally regulated timetables and the imposition of a plethora of non-pedagogical interests" (p.43). But Mathisen does not take his analysis beyond a reflection on Lefebvre's work to empirical findings of his own, and—similar to other scholars—also equates rhythm only with the temporal whilst backgrounding the spatial.

Finally, a specific comment must be made on the work of Foucault in describing timetables and rhythms in institutions of discipline (1977). *Discipline and Punish* does not deal with schools exclusively, rather drawing out an underlying regime of discipline that structures factories, schools, prisons, clinics and asylums. But Foucault's descriptions of modern institutional schooling, with its rhythmic repetition, dressage, bells and bodily conformity, is a critical discussion of the mechanisms of power schools utilize to try and fold timespace-lived into timespace-conceived, and his work on subjectivity and capillary power is well used in education studies. What Foucault does not offer, which Lefebvre does, is polyrhythmia: a theoretical framework for dissonance and poly-valency of activity in supposedly 'disciplinary' institutions such as schools. Foucault's description of rhythms for schools does not capture the messiness of the everyday.

3.4.1 South African research on rhythms

One of the few South African studies that examines schooling rhythms is Jacklin (2004a, 2004b). Jacklin describes pedagogy—the main concern of interventions and efforts to enact school change—as a "hybrid practice involving a variable and contingent relationship between its three organising referents: discourse, conventions... and space/time" (2004b p. 373). While her study constituted a primarily theoretical contribution, its empirical work across two high schools suggested a locally contingent pedagogic rhythm at the level of the classroom which Jacklin described as 'arid', wherein rhythms of teaching and learning

were mediated by material and social timespace in the classroom to reduce pedagogic transmission during lessons. While other studies (e.g. Taylor & Vinjevoold, 1999) normatively identify such aridity as a function of poor conceptual knowledge on the part of teachers, Jacklin's work problematizes such a simple theory of change by historicizing and locating pedagogic work in rhythmic timespace that is both materially and discursively constrained.

Another South African-specific text regarding education, space, rhythm and inequality comes from Christie (2013), who too argues that space and rhythm be explicitly deployed to reason more nuancedly about postcolonial education inequality. Christie contends that spatialising and rhythmic frameworks can help to hold the global and local in conversation, and augment the triad of race-gender-class to understand how spatialized rhythms produce and sustain inequality, stating that "an analysis based on spatial practices is unlikely, of itself, to achieve different overall conclusions, but it may well enable different strategies for action" (ibid., p.778). Christie calls for empirical investigations into "the ways in which these historical geographies continue to influence present practices in the spatial production of inequalities at the level of the school" (ibid., p.783), but—unlike Jacklin—does not provide such an empirical analysis.

This study builds on Jacklin's work in response to Christie's call. It expands the frame of the arid lesson rhythm from the level of the classroom to that of the school, using the timetable. In doing so, it questions how aridity at the level of the lesson might be undergirded by rhythms at the level of the school, and hence what role schooling rhythms rooted in the temporal and the spatial might play in producing and reproducing schooling inequalities.

3.5 Timetables

Empirical research on school timetables proved surprisingly thin in the literature. One of the most salient texts describing school timetables and their relation to rhythms of teaching and learning, as well as school outcomes, dates back to Ball et. al.'s 1984 chapter entitled "The tyranny of the devil's mill: time and task at school" (although this text is purely conceptual and references very little empirical investigation). Ball et. al. foreground schools' reliance not only on rationalist monochronic clock-time and Cartesian space (i.e. rational timespace-conceived) but how timespace itself constitutes the grounds for

dressaging both teachers and students into ideal rhythms¹⁵, as well as constructing the field of education.

A modern industrial conception of time is strongly present in schools, where timetabling symbolizes the finite, ordered and scarce nature of 'school time', although this essentially industrial attitude towards time is set within an archaic, traditional annual cycle of work with fixed points set for the completion of tasks.

(Ball et. al., 1984, p.41)

Ball et. al. argue that the organisation of teaching and learning in modern schooling is always oriented around a fixed telos—a test, an exam—at a point in the future: that the field of schooling is not only structured against a specific *illutio*, but that such an *illutio* is temporally grounded. School must not only be completed, but completed at a certain pace, in a certain time frame and with a certain ordering as represented in the timetable-curriculum relation. They continue that “the experience of the activity, the task, is subordinate to the ‘pace’ set by the teacher” (ibid. p.42) although this pace could rather be seen as *interpreted* by the teacher and set by the curriculum enacted through the timetable i.e. by policy.

Students are passive in this relation to school timespace: for Ball et. al. the ‘vast majority’ of students’ personal timetables are “subordinated to the standard period, school day, school week and term; and the synchronization and sequencing of the timetable” (p.42) although *experiences* of such are far from standardized (ibid. p.49). What is being described by Ball et. al. in fact coincides with Lefebvre’s timespace triad of conceived (timetable), lived (actual lessons) and perceived (subjective experience), although still making the error of assuming the timetable’s total hold on practice (see Chapter Two) which is far from given or obvious.

Ball et. al.’s work foregrounds two aspects of timetabling as it relates to this study. Firstly, they highlight the relation of everyday activity to school timespace and how this is mediated by context:

The subjective¹⁶ structure of school time is built up for the teacher upon a number of non-simultaneous dimensions. The order and practical limitations of events are imposed in the social calendar of temporal arrangements—the school day, the school week and the school year. This dimension of lifeworldly time intersects with the constraints of ‘biological’

¹⁵ Given Ball’s extensive subsequent interest in, and use of, Foucault, this focus on discipline and subjectification through the timetable is unsurprising.

¹⁶ ‘subjective’ here meaning that the structure of school time is formative of the subjects who conduct their daily life in that timespace realm.

time, that is pupils' speed of working, of learning, spans of concentration, and with the organisation of curriculum knowledge; the content and coverage of the syllabus and teaching methods. As we have seen **these various constraints upon practical action, upon the possibility of actualizing plans and projects, are more or less important in different contexts.**

(Ball. et. al., 1984, p.56, my emphasis)

The second salient observation offered by Ball. et. al. is how the manipulation of timespace-conceived—and its associated rhythm—is a strategy of social domination expressed in “the power of certain class or groups to impose their conception of appropriate social periodicities upon others.” (ibid., p.46). In Bourdieusian terms, Ball et. al. are noticing how the timespace-conceived represented in school timetables makes non-neutral assumptions about ideal rhythms, which will necessarily be more in sync with the habitus of some students and teachers, compared to others.

Despite observing that timespace and timetabling are “a fundamental organizing principle of the everyday life world of schooling” (ibid., p.57), very little research has been done on timetables since Ball et. al. wrote in 1984. Some historical work on variations of school plans and organising of grade progressions and relations has been done on US schools in the 19th century (see Isensee, 2019), but this work only considers the inputs to timetables, not timetables themselves, nor their enactment and relation to teaching and learning rhythms.

One longitudinal empirical study was conducted by Fröm et. al. (2003) on a Swedish intervention wherein select schools were given licence to be ‘timetable free’ for five years from 2000 to 2005. Being ‘free of the timetable’ in the Fröm et. al. study meant that schools could schedule time periods without subject specification, in which students could select their own focus for that period and autonomously organise their learning activities under the guidance of a present teacher. Fröm et. al. interpret this as the ultimate form of decentralization, where decision-making is devolved even further from the level of the school to the level of the student. However, the fluidity generated in time use for learning was harder to hold in the secondary schools examined in the study (as compared to the primary schools) due to teacher-subject specificity.

A strong motif in the Fröm et. al. work is that of ideal timespace use and how student or teacher deviations from this ideal are framed normatively as ‘wasteful’ of time, which is thus tacitly cast as a quantifiable commodity to be productively ‘spent’ on certain activities—such framings of time are also discussed in Adam (1990, 1999) as well as Thompson’s influential paper on time and work-discipline (Thompson, 1967). Of interest to this study is Fröm et. al.’s conclusion that the fluidity generated by allowing students

autonomy to self-organise is not realized due to resourcing constraints, and these constraints hindered the intervention in question from genuinely exploring what 'timetable free schools' might do differently to their more structured counterparts (Fröm et. al., 2003).

Finally, a single Masters study from South Africa was found regarding timetables and teachers' use of time (Reid, 1990). While Reid's study was conducted in the same province as was the fieldwork for this dissertation, it was during the apartheid period when most of the key timetable inputs described in Chapter One took a significantly different form to the post-apartheid era. Reid's thesis examined teachers' struggle for temporal autonomy as a form of conflict and power contestation in schools. But the study still took the timetable as given and binding on teachers' activities and rhythms, and did not make the timetable itself an object of analysis.

In all three studies (Ball et. al., 1984; Fröm et. al. 2003; Reid 1990) school *time* is set up as distinct from school *space*. This study then seeks, rather, to conceptually and empirically address an existing gap in the literature on schooling inequalities and their relation to policy by examining timetable-rhythm relations both temporally and spatially.

3.6 Conclusion

This chapter has drilled down from a large corpus of literature regarding school inequalities and its relation to policy and change to a small selection of studies on school timetables and school rhythms. In doing so, rationalist framings of timespace have been problematized as unable to hold the complexity of school practice. School effectiveness approaches in particular have been critiqued as a-contextual when considering time and space in schools and how timespace is dialectically productive of and produced by activities at multiple levels in the schooling system, from policy through to local everyday minutiae.

A gap has been identified in examining timetables and their relation to teaching and learning rhythms, how their properties might be shaped by policy acting in context, and how in turn these rhythms are related to the (re)production of schooling inequality. The next chapter outlines an analytical framework and method for exploring these relations, which will structure the analysis for the remainder of the thesis.

4.

Methodology and analytical framework

4.1 Introduction

Armed with a practice theory that focuses on the relation between forms of capital and rhythms of activity, this chapter describes how these concepts were operationalized to study timetables, their roots and their consequences.

A pluralistic approach to the research design was required to describe whole school practice for this study, holding the three sets of concepts in conversation: Lefebvre's triad of timespace, and also his typology of rhythms, along with Bourdieu's concepts of habitus-capitals-field. These concepts were applied across three layers of analysis, namely **policies, timetables** and **everyday rhythms of school**, which relate to the research questions outlined in Chapter One.

This chapter outlines for each layer: what data was produced and analysed, why these forms of data spoke to the research question(s) at hand using the concepts outlined in Chapter Two, and how the data was produced.

A case is made for beginning the analysis with timetables as a clear entry point, and then working 'backwards' into policies and 'forward' into rhythms. As the roots and results of timetables are explored, an analytic framework is built up that traces the five threads of policy described in Chapter One into timetables, and how policy enactment at various levels of the education system shapes the capitals available to schools for timetabling.

After describing the structure of the study and building a framework for analysis, a rationale is provided for the two schools chosen and why they offered 'telling' cases, both as individual instances and comparatively. Details are provided of the overall data production process and design decisions therein, as well as challenges that arose during fieldwork.

Finally, the chapter concludes with reflections on reliability and validity and where these may have posed threats to the study's design. Ethical considerations are also discussed.

4.2 The design process and how the analysis is sequenced

Neither the process of designing the study, nor the sequencing of the analysis, were 'linear' by conventional standards.

4.2.1 Developing a framework to study timetables

The study's design—and resultant analytical framework—developed iteratively through rounds of increased conceptual clarity and empirical exploration. It was also informed by personal experience as a teacher responsible for constructing school timetables.

As the design and focus of the study crystallized, an analytic model emerged for examining how key policies shape timetables, building on the five strands of policy identified in Chapter One. The framework was constructed by 'looking upward' towards the origins of policies from the ground-level of the school along each strand, tracing how each policy's enactment in context produced the capitals required to construct timetables, and how these capitals shaped varying qualities and properties of those artefacts. This model became increasingly refined throughout data production and analysis, and in turn continued to refine what other data was needed to confirm, refute or complement what had already been gathered.

4.2.2 Sequencing of analysis

Just as the development of the analytical model was not linear, neither was the process of analysis, or its presentation in the subsequent chapters.

In terms of influence, the three layers of the study would be sequenced as follows:



Figure 4.1 Sequencing of analysis layers by influence

The unidirectionality of the influence between these layers is relatively strong: timetables do not influence policies, and rhythms may backwash slightly into timetables, but weakly (examples of this are explored in the analysis chapters). Timetables' properties are far more strongly shaped by the configurations of who, whom, what, with what and where i.e. the forms of capital that policies avail in context (or don't, as the case may be). For example, how policies that regulate schools' ability to charge fees affect their staffing quota, the students they accept, and the number of rooms they can build etc.

However, as will be explored in the analysis, the policies shaping timetables are dense and plural, and the rhythms of schools are also multifaceted and complex. For clarity of presentation, the timetable itself presents a neat, clean point of departure for unpicking the relations between policies, capitals and rhythms. The analysis, then, does not unfold in the direction of influence, as Figure 4.1 suggests, but begins at the central node: the timetable.

Forms of capital for timetabling are also deeply intertwined with the timetable design process, and difficult to extricate as a separate object of analysis. The analysis concurrently examines these forms of capitals available at the level of the school alongside the timetable they forge, tracing the connections between these capitals and the qualities of the timetable they build.

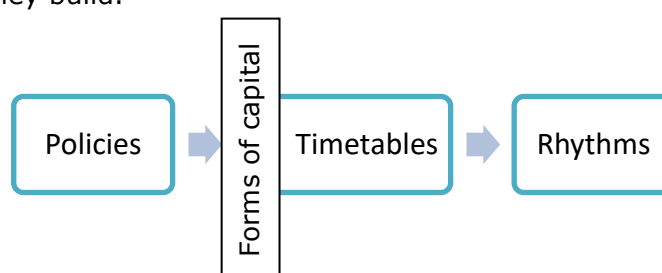


Figure 4.2 Policies influence timetables by availing different variations of forms of capital

In Lefebvrian terms, the relation between the school timetable and everyday school rhythm is the relation between timespace-conceived and timespace-lived. While timespace-perceived is of interest to the study insofar as it shapes individual actors' relation to dominant rhythms, individual actors' subjective experiences of schooling practices do not constitute the main focus of the study. The primary focus, then, is on the relationship between the ideal timespace-conceived set out in policy texts, the enactment of this ideal at the level of the school through the design of a timetable, and then the relationship between a school's everyday rhythm lived and how forms of capital regulate the closeness of conformity to the imagined timespace represented in that timetable.

The following diagram illustrates how the analysis layers align with Lefebvre's triad of timespace.

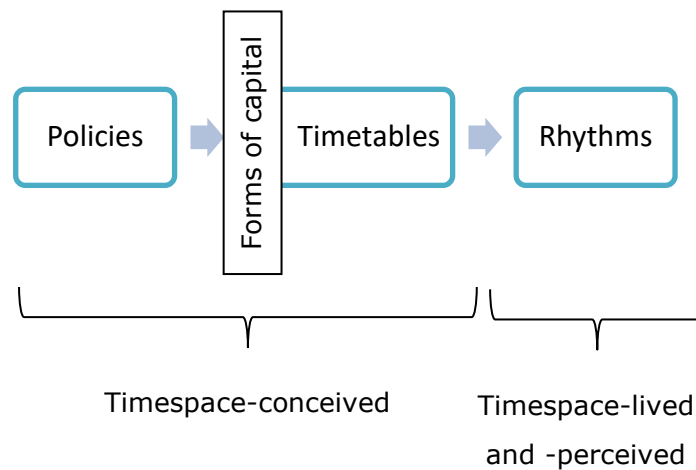


Figure 4.3 How the layers of analysis correspond to Lefebvre's triad of timespace

The analysis for the remainder of this thesis uses the following ordering:

1. Timetables, and the forms of capital to build them (Chapter Five)
2. Policies that shape schools' available capitals in context (Chapter Six)
3. Schools' rhythms, and their fidelity to the timetable (Chapter Seven)

The analytical framework tracing the five threads through these layers is unpacked as the study design unfolds.

4.3 Timetables: what and how data was produced

The rationale for this study suggests that timetables provide a key articulation point whereby policy reaches into schools. The artefact itself is a function of the quantities and qualities of capital availed in context, and in turn contextually sets (differentiated) rhythms of teaching and learning. Timetables, then, are the point of departure for the study's analysis.

4.3.1 What was examined: identifying data from timetables

Examining timetables at the level of the school involved analysis at two levels: firstly, the actual qualities of the timetable itself, and secondly, the availability of local capitals at the level of the school that shaped these qualities.

These two aspects of analysis were not easy to separate empirically, with timetable qualities dialoguing with forms of capital available. Rather, the two layers were examined together using the strands of timetable assembly discussed in Chapter One.

A brief recap of the five strands is listed in Table 4.1 below:

Strand	Timetable inputs and configurations
Who	Teaching staff (and, by proxy, non-teaching staff)
Whom	Students
What	Curriculum configuration
With what	Non-personnel resources
Where	Infrastructure (local), and more tacitly, geographical location

Table 4.1 Key inputs for constructing school timetables.

Figure 4.4 below illustrates these key inputs as they relate to the timetable, outlining the embryonic phase of the analytical framework. For each input, the properties needed for timetabling are listed.

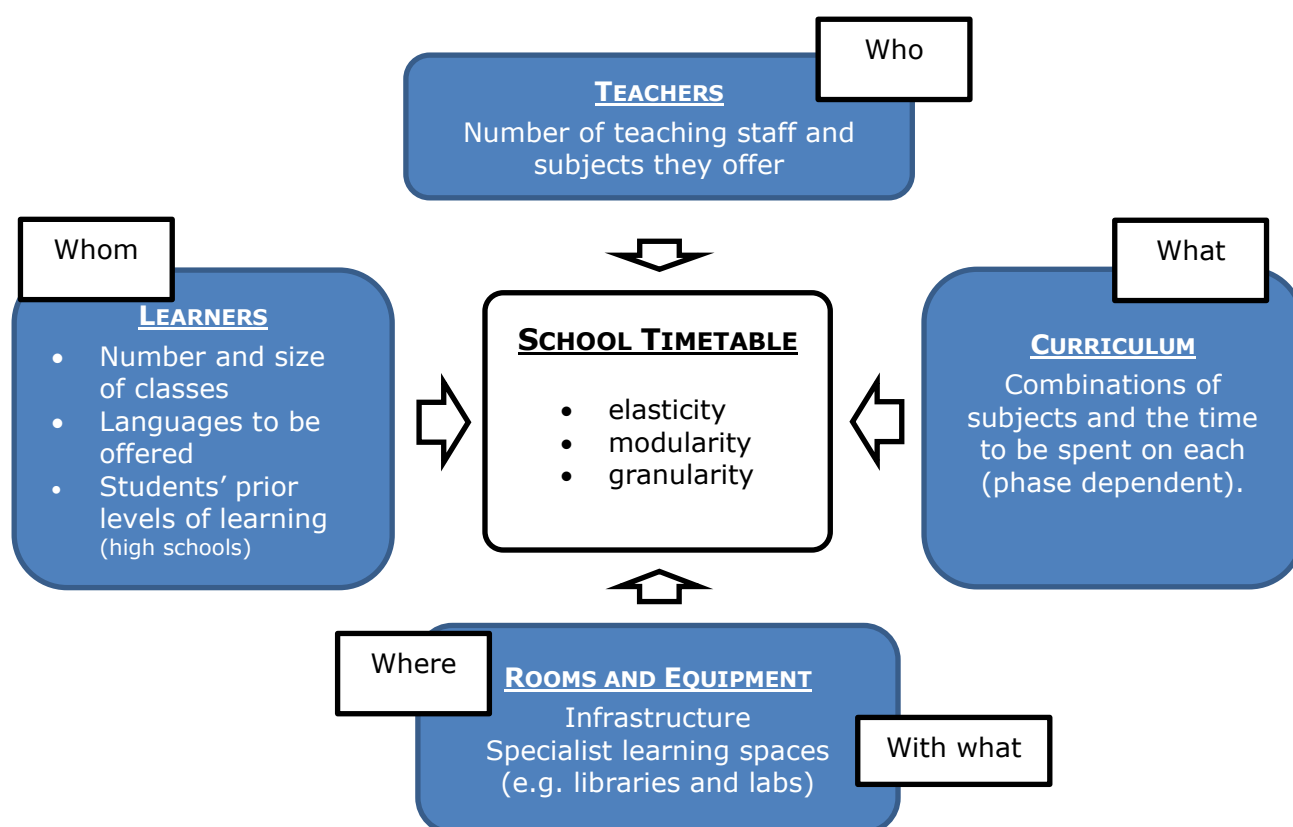


Figure 4.4 Input parameters required for the activity of timetabling

4.3.1.1 Timetable qualities: elasticity, regularity and modularity

Preliminary empirical analysis of real timetables suggested three core qualities of these artefacts that reflected the quantities and forms of capital used to construct them. These three qualities, named **elasticity**, **granularity** and **modularity**, provide a further analytical language of description that allows for systematic comparison between both schools' timetables. Each is unpacked in more detail below.

Elasticity

The quality **elasticity** refers to the amount of redundancy in the timetable. This manifests as the number of free rooms and/or free teachers at any one given time. Elasticity can also refer to the properties of specialist rooms, e.g. science labs (a school with three parallel science classes but only one lab will have less elasticity than a school with three parallel science classes and three labs).

Curriculum policy creates a *lower bound* on timetable elasticity as it prescribes the minimum amount of time to be scheduled for each learning area. That is: elasticity cannot be legitimately manufactured by reducing contact time and making the school day shorter (and thereby scheduling less time to cover the curriculum with the same number of rooms and staff). Staffing and rooming availability create *upper bounds* on timetable elasticity, since staff cannot legitimately teach two classes at the same time, and a room cannot be used by two classes at the same time¹⁷.

Modularity

The quality of **modularity** describes the degree of independence between different components of the timetable. Modularity manifests in what timetablers refer to as *runs*. A 'run' is a slice through the timetable where a whole grade of students is scheduled to have the same subject at the same time e.g. the whole of Grade 9 has English at 9am on a Tuesday. Runs are a necessary part of high school timetables, since in the FET phase (Grades 10, 11 and 12) students take elective subjects and not all students are taking the same selection. Electives are then timetabled into runs so that the class groupings in the grade can break up and reform into different groupings based on subject choice. For the FET phase, there will be a minimum of three elective runs for each grade, since students must take three elective subjects.

A higher degree of modularity in a timetable is indicated by a higher number of runs in the cycle. In addition to the runs required for FET electives, extra runs could also be used to set or stream mandatory subjects, such as languages or mathematics. Modularizing the timetable using runs can also be done in lower grades, and is not limited to the FET phase.

Keeping teachers allocated to single subject areas also increases timetable modularity: e.g. changing the arrangements for mathematics will only affect mathematics teachers if their lesson allocation is limited to this subject; but if mathematics teachers are also teaching English, then changes in mathematics class arrangements may have consequences for English classes.

Timetable modularity can range from 'enmeshed' to 'loose'. An enmeshed timetable has very few runs: the main organising unit is the class-group, not the whole grade. Teachers may also be spread across multiple grade and subject areas. An enmeshed timetable

¹⁷ In schooling conditions where extreme resource shortage occurs, these types of 'timetable breakages' do occur: teachers teach multi-grade classes simultaneously (collapsing what should require two rooms into one room). This author has also experienced 'teacher splitting' in her own professional teaching career, where she had to teach two distinct lessons in two rooms simultaneously.

means one change in the arrangements has a series of knock-on effects across all grades and subjects. By contrast, a loose timetable is deeply modular with many runs and single-subject focused teachers: different components of the curriculum are scheduled relatively independently, containing the effects of schedule changes within a particular subject-grade combination.

Higher modularity in a timetable increases the school's ability to make minor deviations such as:

- grade or subject specific outings
- formal assessments (which could be simultaneously conducted across a whole grade in normal lesson time)
- managing teacher absence (an absent teacher's class could be distributed to other teachers who will be delivering the same subject at that time)
- rooming changes (e.g. sharing a science laboratory between two parallel science classes)

Granularity

Timetable **granularity** refers to both the size of the individual lesson units in relation to the total timetable cycle, and the uniformity of lesson length.

A larger lesson unit, or *coarser* granularity (e.g. an hour, or 50 minutes) produces fewer changeovers between classes, but makes scheduling a curriculum compliant timetable more difficult. A smaller lesson unit, or *finer* granularity (e.g. half an hour) produces more changeovers, but makes 'fitting' the lessons into the mandated school week an easier task¹⁸.

If the lesson length does not divide evenly into the total weekly hours of contact time required, then lesson lengths will need to vary and not all lessons will have the same time allocation. Varied lesson lengths make the granularity of a timetable *irregular*, as opposed to a *uniform* granularity formed by a consistent lesson unit¹⁹. Irregularity makes timetabling more difficult, as units are not interchangeable across the day and week.

¹⁸ A useful metaphor to visualize the difference between coarse and fine granularities: the school week is akin to a fixed size glass jar, and the lessons to be arranged inside are akin to stones. Using smaller stones makes getting different combinations into a jar easier than if larger stones were used, especially if the volume of the stones and the jar are both fixed.

¹⁹ Similarly, uniformly sized objects, e.g. marbles, are easier to stack efficiently into a limited confined space than irregular sized objects e.g. seashells.

Interactions between the different timetable qualities

These three qualities of timetables do not exist independently of each other. Each affects the others in particular ways.

Building modular timetables requires a degree of elasticity in rooming and teachers available. Higher modularity makes the scheduling unit larger (as the timetabler must work with a run of classes across a whole grade, not just a single class). Modular timetables also effectively synchronise the lesson schedules of all teachers teaching a single subject-grade combination, making less room for manoeuvre. Once the average teacher's lesson load goes over a certain threshold, there is insufficient flexibility and a run must be 'broken' to make the timetable fit.

Single-subject allocation to teachers is also only possible when there is sufficient elasticity to cover the mandated curriculum time without totally filling every teacher's timetable. An example: if a timetable cycle consists of 24 hours in a week, and mathematics is taught to each class for five hours a week, then a teacher can teach four classes of mathematics (20 hours) but will have a residual four hours left into which another class of mathematics will not fit. If there is insufficient elasticity and the teacher must fill part, or all, of those four hours, she may be allocated another subject which only requires four hours or less. But this then splits her across two subject areas, making the timetable less modular.

Modularity (as built through elasticity) also interacts with granularity. Finer grained, regular lesson lengths provide more flexibility, but can still be combined to create larger contiguous periods of time if necessary (e.g. double periods), provided the rooming and staffing contingents are available to do so. Regular lesson length also makes segments of the timetable interchangeable, meaning modular, regular components of the whole school timetable can be swapped if desired.

Automating timetable generation

Whether timetables can be effectively automated depends on these properties. More elasticity generates more viable possible combinations of rooms, students, subjects and teachers, making it easier for a computer algorithm to find an acceptable combination. Higher modularity decreases the complexity of the timetable by working with whole grades instead of individual classes, and uniform regularity makes swapping lessons to find good combinations more viable. But an enmeshed, irregular, inelastic timetable is harder for a computer to produce. Appendix E provides a more in-depth discussion of how timetabling software works.

Timetables from each school in the study were analysed for these three properties. The analysis then turned to the forms of capital schools had available to produce their timetables. Each input from Figure 4.4 is described in more detail below, reflecting the information a timetabler requires to assemble the timetable.

4.3.1.2 Who?

The who of the timetable represents primarily the teaching staff of the school. Tacitly, it also asks who with i.e. non-teaching staff, who carry administrative burdens that would otherwise fall to teachers in their non-contact time. Each timetable was analysed for characteristics regarding the who of teaching and learning.

Numbers

The quantities of staff included how many teaching staff were employed at the school, and whether they were paid by the province or the school (see also “With what?”). Quantities of non-teaching staff were also gathered to establish support available for teachers.

Workload

Intended workload was calculated from the timetable for each teacher. The obvious indicator of teacher workload is the total number of contact hours expected of each teacher, as well as the percentage of contact time as a fraction of total contact time for the week.

Less obvious are the qualities of these contact hours. Teacher workload was also examined for factors that intensify the amount of work *for* each scheduled lesson. This manifests in two forms:

- a) the size of classes²⁰ (**assessment load** per lesson), where marking and evaluating a class of 40 students is more work than marking and evaluating a class of 25 students. Larger classes also require a greater degree of **differentiation** in planning, as a larger group of students is more likely to have a broader spread of learning styles, prior attainment and pace; and
- b) the **planning load** of the curriculum delivery expected for each teacher. Each subject-grade combination represents a separate unit of planning. Teaching across multiple curriculum areas requires more cognitive spread than planning the same lesson for five groups of students, or working within one curriculum area. For

²⁰ While larger classes are often anecdotally described as ‘harder to manage’, this is far from an obvious or consistent phenomenon. The focus of this study was whole school timespace and rhythm, and hence did not go into individual classroom practice, which would be necessary for examining the relationship between class size and issues of discipline/student conduct.

example, teaching mathematics AND life orientation AND economic management sciences across four grades is more work than teaching only mathematics to two grades.

Each teacher's workload was analysed for these forms of work intensification that contribute to planning and assessment load but not to overall contact time.

Match between training and lesson allocation

Teachers' preparation for the work they were assigned was also considered. If a school lacks elasticity in its staff available to cover the curriculum, teachers will necessarily be allocated subjects for which they have not been trained to ensure that all lessons are allocated. The less flexibility in the staffing of the school, the more teachers are allocated subjects outside of their specialisation.

To investigate relations between teachers' training and their lesson allocations, accounts of teachers' training histories were collected to historicize the embodied cultural capitals that they had available to them for their work. This is particularly relevant in the South African situation where differentiated opportunities to learn teaching skills were racially biased by apartheid teacher preparation policies prior to 1994.

4.3.1.3 Whom?

The strand whom refers to students. The following issues are of significance to the task of timetabling.

Numbers

Student enrolment at each grade level shapes the number of class-group units that must be accommodated in the timetable. The size of each class depends on teachers available (see "Who?").

Demography

The demographic properties of students are also of significance for timetabling, especially their home language(s). Schools must negotiate between the languages spoken in the homes of their students, the languages of support materials available to the school, and the languages of formal assessment (namely, English and Afrikaans). Examining timetables for language offerings indicates the cultural capital available to the school through its students.

To complicate language considerations further, parents often have specific expectations about a school's responsibility to furnish their children with proficiency in powerful

languages *not* spoken in the home (Heugh, 2002), even if this desire may run counter to the evidence about best classroom practice and language policy. The school timetable must then accommodate an uneasy compromise between the languages already in use by students, and those that students and parents aspire to obtain through schooling.

Beyond the language complexity of students who are South African nationals, schools also need to accommodate students of foreign nationality whose linguistic repertoires differ significantly from local ones. The more diverse the language-profile of the student population, the more complex language issues may become in the timetable.

Prior academic performance (secondary schools only)

Students' past learning attainment, often a function of their economic status, is a less obvious source of cultural capital for timetabling. Such capital however is relevant to how a secondary school, such as the ones in this study, interprets the curriculum.

For example, a school accepting low SES students may increase time allocation in the timetable for low-performance/high-stakes subjects, adding an extra half an hour of mathematics to the weekly schedule. In South Africa, socio-economic status may also be used as a proxy for English proficiency, and schools may increase their language contact time in anticipation that students from poor backgrounds also often have insufficient English skills compared to what the curriculum demands of them (Kapp, 2004). These decisions will necessarily involve depleting time in other curriculum areas or extending the schooling day. Potential learning backlogs could also be accommodated spatially, by splitting class groups into smaller units for more intense attention, and setting or streaming students. Both these strategies require a degree of elasticity in the timetable.

A school receiving middle class students, on the other hand, will tailor its timetabled subjects towards parental expectations/middle class aspirations, and streamline its subject offerings towards the entry criteria of prestigious tertiary institutions (see "What?" for more details on curriculum interpretation for timetabling).

When examining forms of capital available to schools for timetabling, admissions procedures also need to be considered. Schools' ability to attract and select 'easier-to-teach' students (with the correct cultural capital) (Ball, 2003) shapes how much timetables need to accommodate students. Schools who command more applications than they can accept could utilize such selection procedures. But schools unable to sustain enrolment rates will be unable to be selective, with consequences for timetable design. Sustaining enrolment rates is also critical for retaining staff and hence sustaining timetable elasticity.

Fee exemption

The number of students *not* paying fees is not of direct concern to the activity of timetabling, but it has very real consequences for the qualities and quantities of capital available to the timetabling process. Fee exemption sits squarely between the whom, the who and the with what, as fee collection affects the number of staff available for the timetable (through extra staff employed by the governing body (SGB) of the school), as well as the properties and characteristics of material spaces available for teaching and learning. Schools that rely on fees to sustain their rhythms of teaching and learning will necessarily need to manage the percentage of enrolled students who are unable to pay.

4.3.1.4 Where?

The where of timetabling is primarily concerned with the quantities and qualities of classrooms available for use. This may also depend on less obvious properties of physical space e.g. the aspect and temperature regulation of a room to be used for music instruments or science equipment, or the acoustic properties of a room to be used for dance or physical education. These will relate to physical properties of the infrastructure of the school, and will depend on historical as well as recent infrastructure, infrastructure maintenance (including health and safety issues) and capital expenditure on developing new spaces in the school for use.

The second aspect of where, namely the geographical location of the school, does not seem directly related to timetabling. However, as the analysis of real timetables will show, this spatial characteristic of a school does indeed affect the timetable in surprising ways.

4.3.1.5 With what?

With what designates the economic capital and objectified cultural capital schools can rally to construct their timetable. While it is not immediately visible in the timetable arrangements, the qualities of school spaces and the quantities and qualities of school staffing (especially supplementary staff over and above state provided teachers) depend heavily on these capitals.

Fee collection is of particular importance to supplementing state provided economic capital. In addition to fees, how schools source donations, rent out infrastructure and access additional concession funding from the state also shapes the with what component of teaching and learning. For example, schools designated as maths and science specialist schools (Dinaledi schools) will receive extra funding towards improving outcomes in these areas, with implications for timetable arrangements.

4.3.1.6 What?

The final input into the timetable is the what: curriculum interpretation. How schools choose (or are pressured) to offer subjects—particularly at the Further Education and Training (FET) phase—as well as language configurations in the lower grades, is core to the distribution of *time* in the timetable to the various learning areas that together constitute *legitimate* school-leaving cultural capital.

It is clear from the description of schools' economic capital that the five strands described are far from autonomous. These strands interact with each other, creating different permutations of capitals available for timetabling purposes. The next section discusses these interactions.

4.3.1.7 Enmeshment of different inputs

What is not obvious from Figure 4.4, or during the activity of constructing the timetable itself, is the manner in which the input parameters interact with each other. These interactions are, however, of interest to school management, who strategize to interpret and enact the relevant policies affecting each parameter in the interests of the school.

The inputs described are reflected in Figure 4.5 below, which now shows—through the use of dotted arrows—the interactions of different parameters that affect, but are not necessarily visible in, the timetable.

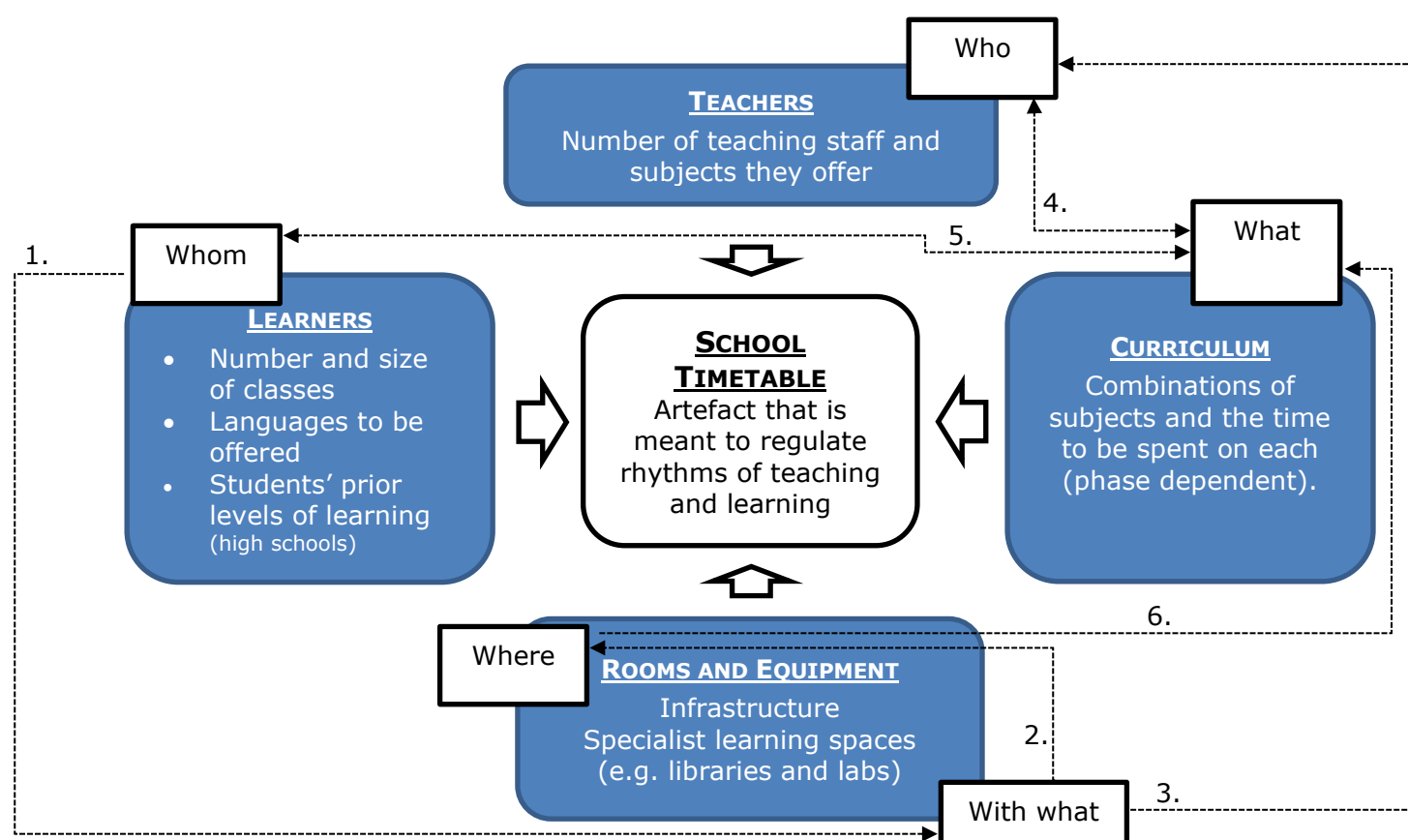


Figure 4.5 Interactions of input parameters required for the activity of timetabling

The connections reflected here were examined by systematically considering each input's effect on all the others, but also by drawing upon past experience of timetabling to evaluate the direction and presence of interactions.

The substance of each connection is described below:

1. Student intake (whom) affects the funding available to the school through fee collection (with what). A school that relies on fees to supplement state provision needs to attract and enrol students that can—and will—pay fees. Schools that do not succeed must make use of only what the state provides. Some schools are designated as fee-free and prevented from collecting fees at all as their student intake are deemed unable to pay by policy decree (See Chapter Six for details).
2. Funding collected, either from fees or donations or other fund-raising efforts (with what) affects the qualities and quantities of the spaces in the school (where). Both the quantity of classrooms, as well as specialist qualities such as lab equipment, library infrastructure, music and art facilities etc. rely on the funds that are not allocated towards paying salaries.
3. The strand with what also purchases embodied cultural capital in the form of extra personnel (who). This has implications for the degree of elasticity in staffing arrangements, allowing for more niche subjects (what) and smaller class sizes.

4. Personnel (who) shapes curriculum (what), depending on the skills teachers can offer and the ability of the staffing quota to shoulder smaller, less mainstream subject offerings.
5. Student intake (whom) also shapes subject offerings (what), particularly languages. Schools may also position themselves in the field as specialists in particular curriculum areas (e.g. a Dinaledi school, or a drama and arts school) which will affect their selection criteria when enrolling students.
6. The qualities of physical spaces in the school (where) also affect curriculum offering (what). For example, a school without a computer lab will not be able to offer information technology. A school without music facilities will not be able to offer music etc.

The timetables examined in this study were analysed for each of these input parameters, their properties and qualities, the forms of capital they represented, the field position implied, and effects on properties of the timetable as a whole.

4.3.2 How timetables were analysed: the data production process

The parameters described above, and their interactions, provide a systematic *what* of timetables. These defined the object of interest when considering timespace-*conceived* in a school's ideal rhythm-setting artefact, as well as how forms of capital come to bear in constructing a timetable.

As described earlier, a pluralistic approach was used to analyse timespace in schools. Timetables were analysed using four sources of complementary data for each school examined: the timetable itself, interviews, observations and assessment data.

4.3.2.1 Timetable data

The primary source of data was the timetable itself (including multiple versions if these were present) as obtained from the teacher responsible for timetabling in each school (the 'timetabler'). Timetables were accessed at the beginning of the school year when the schedule was settled and disseminated to staff and students.

Each school's timetable was coded twice using a spreadsheet. The first coding was teacher-centric, using colour to foreground contact time (elasticity). The quantities of teacher contact time were calculated, and the number of planning groups, subject areas and assessment groups were extracted. Other features of the timetable were also examined, including assemblies, department meetings and substitution duties (See Appendix C).

The second coding used subject-group colouring to show synchronicity across the timetable through runs, foregrounded modularity and granularity (See Appendix B).

4.3.2.2 Interviews

Interviews with the timetabler, as well as the principal, and the teacher or administrator responsible for finance at each school, allowed for deeper exploration into the motivations behind timetabling decisions, the forms of capital the school has available and how these were obtained, as well as the dilemmas the school experienced in making trade-offs and decisions about the various input parameters described.

A standard set of questions were predetermined for each area of interest (see Appendix G). These questions were then augmented through observation with more specific questions particular to that school.

Portfolio	Rationale
Principal	The principal drives the vision of the school and the orchestration of various forms of capital towards that goal. Both principals were interviewed for their perspectives on the field position of their school and the prerequisites for sustaining or improving position, as well as the curriculum and admission strategies used in each school and how these were enacted.
Timetabler	The teacher responsible for the timetable was interviewed about the decisions made in the timetable's design, as well as how information was organized regarding the available input parameters to complete and stabilize the timetable.
Finance	The person in charge of overseeing finances was interviewed to establish the school's fee rates, collection success rates, financial planning horizons and the activities undertaken to secure economic capital that was potentially precarious. Challenges in obtaining support from the state were also explored, along with the implications of various windfalls and/or shortfalls in the school's financial situation.

Table 4.2 Rationale for interviews conducted to examine schools' timetables.

4.3.2.3 Observational data

Extensive observation data on the physical infrastructure and space of the school provided rich data for where, including detailed inventories and maps of spaces and their material properties that might affect timetable design. Each school was mapped using floor plan diagrams to which details about qualities of space were added. Notes on storage and forms of technology (e.g. labs, computers and specialist spaces) were made²¹.

²¹ Unfortunately these plans cannot be made available, in order to maintain the participating schools' anonymity.

4.3.2.4 National Senior Certificate results and CEMIS data

Lastly, each school's National Senior Certificate results were drawn from the national database of results available from a local university repository, provided by the Department of Basic Education (DBE). Other supplementary data was also obtained directly from the DBE's dataset assembled from the Annual School Survey conducted each year nationally, and from the Central Education Management Information System (CEMIS). These datasets provided assessment information, enrolment data and other descriptive statistics that helped position each school examined in the field of education more broadly. It also added further evidence to their relative access to forms of capital and hence to claims of their relative fortified- or exposed-ness.

Using these plural sources of data, the timetable as an artefact of ideal timespace-conceived was analysed both for its qualities, and for the relations between the design features of the artefact and the forms of capital available to the school.

The next section details how these forms of capital (and, by extension, the design features of the timetable) were traced back into key policies that reach.

4.4 Policy roots of timetables

The previous section described how timetables were analysed and how timetable features were related to the forms of capital available to schools. This next section now describes the analysis of how these capitals at the level of the school are distributed and regulated by policy.

4.4.1 What was examined: identifying policies for analysis

Schools' access to the various forms of capital required to create a timetable are regulated by policies that reach. The second move in the analysis for this study is thus to trace each of these threads from the timetable back to policies to describe how schools came to have access to the capitals they do, and what role context plays in policy enactment.

The diagram below maps the policies involved onto each input strand:

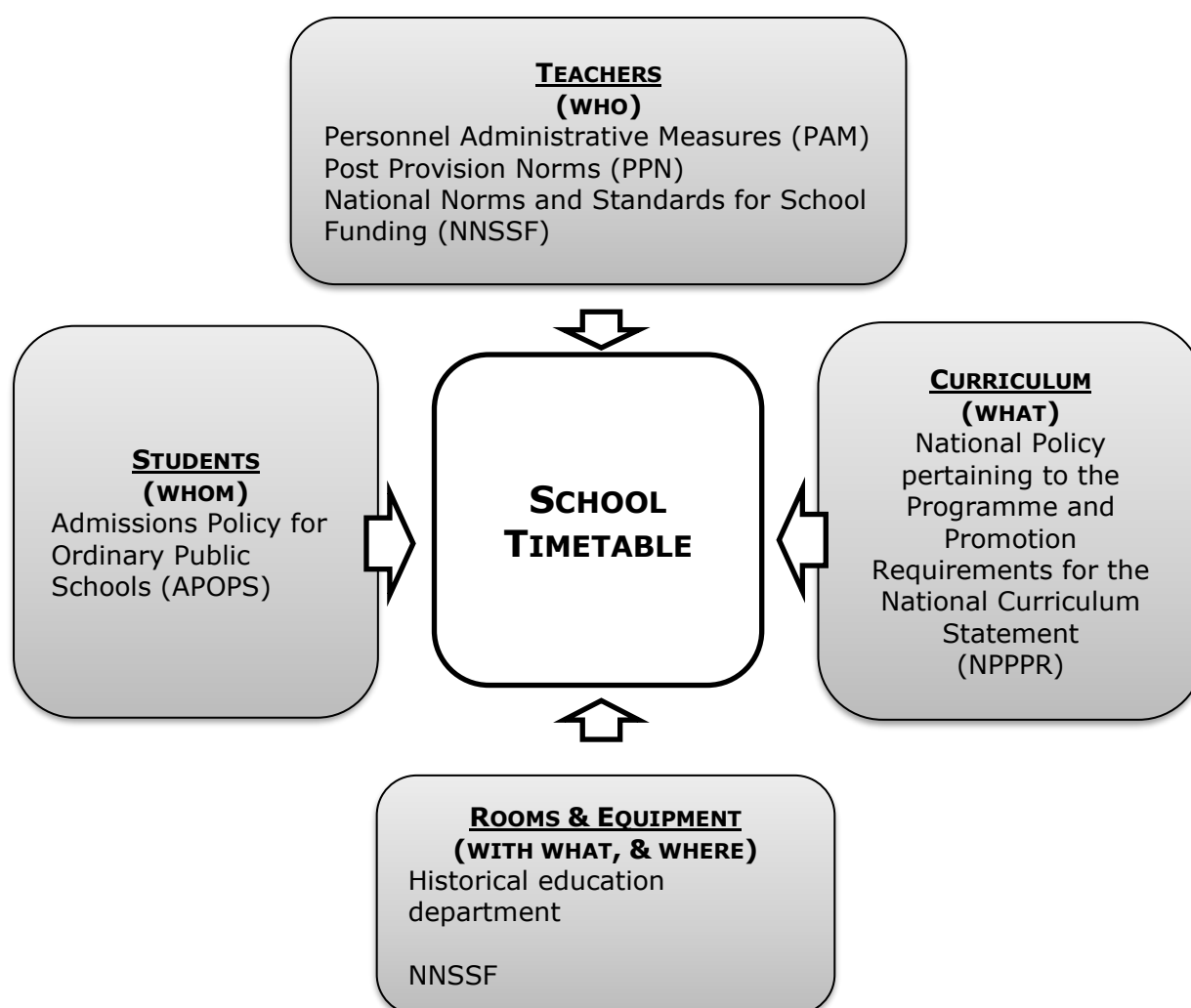


Figure 4.6 Policies informing availability of capitals (regulated or distributed) for each timetable input.

Comparing Figure 4.4 to Figure 4.6 above reveals that the policies do not neatly map one to one onto timetable inputs. The interaction *between* policies also begins to become apparent, as one input may result from the interplay of more than one policy (e.g. admissions policies interact with curriculum through language configurations).

The diagram above, however, does not capture the layers of enactment, interpretation and decision-making for each input strand. Figure 4.6's perspective could be thought of as 'staring upward' from the ground-level of the school as policies reach and land contextually. Decisions *about* capital distribution and regulation, and where they are made, is not obvious from this angle.

Decision-making and governance for these inputs reside at different levels of the education bureaucracy, and sometimes decision-making responsibility is distributed between more than one level. Figure 4.7 juxtaposes these five strands of policy that reach against the

three layers of decision-making authority in the South African case. By bringing these threads into conversation with decision-making at various levels of government, a model is produced that connects key school organising considerations to the policies that shape them.

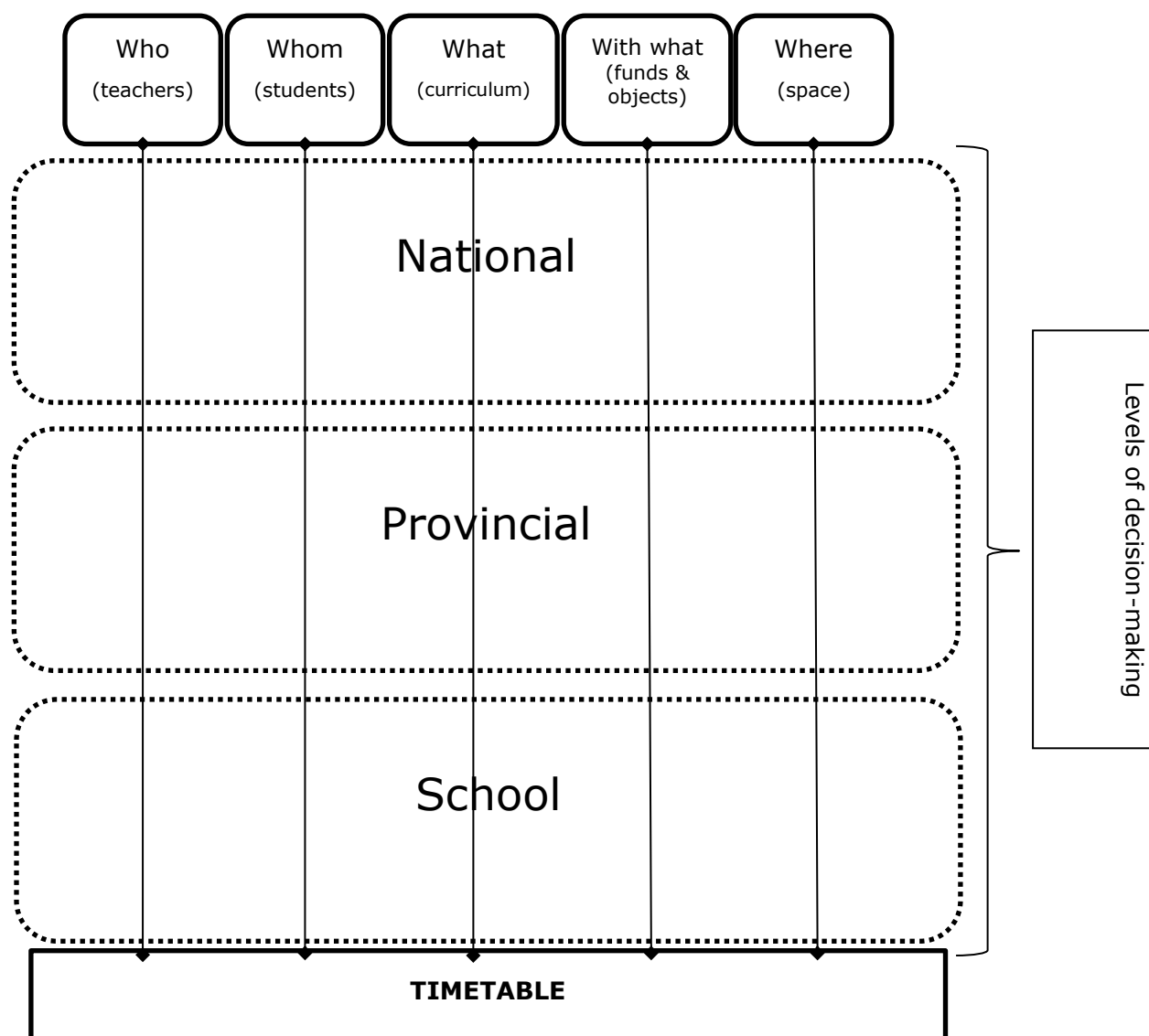


Figure 4.7 A model of reach: policy strands of capital regulation/distribution and their layers of enactment

The model described in Figure 4.7 provides a framework for tracing the distribution and regulation of capitals through each thread at each level.

Interactions between strands described in Figure 4.5 are not apparent in Figure 4.7, although they do play out in practice. Such interactions are not shown on the diagram primarily because they are also not considered in the policy documents (See Chapter Six). Interactions tend to manifest at the level of the school in the form of practical constraints on the timetable.

The policies identified earlier using the five-stranded model did not need to be analysed in their entirety. Of interest to the study are those sections that shaped timetables, namely:

1. Distribution or regulation of forms of capital necessary for constructing timetables, and how this interacts with the education field at large.
2. Representations of how schools organise their timespace in accordance with the *illusio* of schooling.

Once the appropriate national policy extracts were identified and examined for each of these themes, provincial enactment was considered. Finally, implications for the schools in the study, and their relative contexts, was described. The main focus was to situate the logic and the constraints of each timetable in the policy environment in which they were forged.

4.4.1.1 Who?

Teachers are the actors tasked with organising and manifesting teaching and learning. Considering the who strand, then, leads us to identify staffing policies for public schools. Two policy documents affect staffing contingents: the first is the Post Provisioning Norms (PPN) outlined in the Personnel Administrative Measures (PAM) (Department of Basic Education, 2016b), a set of regulations promulgated in terms of the Employment of Educators Act (EEA) (Department of Education, 1998a). This policy outlines formulae and guidelines for the deployment of *provincially employed* staff to public schools depending on multiple criteria. Such staff are in the employ of the province in our layered model, and staffing allocation decisions happen at this level.

However, there is a second source of teaching and support staff for schools, namely those employed by the school directly from funds sourced privately, either through donations and/or fees. Thus, the policies governing schools' ability to raise private forms of economic capital are of interest. These policies are the National Norms and Standards for School Funding (NNSF) (Department of Education, 2006a), which outlines which schools may charge fees (and who should be exempt from paying these), along with sub-sections of the South African Schools Act (SASA) (Department of Education, 1996a) that outline schools' responsibilities for raising supplementary funding. A school's capacity to leverage these policies will determine their access to additional economic capital, and their resulting ability to employ additional teaching and support staff.

Thus, a combination of decisions at the level of the province and the level of the school combine to create the who of the timetable. Both the PAM and the NNSF were examined for the criteria shaping access to capitals in the form of staff.

The Personnel Administrative Measures (PAM) from the Employment of Educators Act (EEA)

Post Provisioning Norms (Chapter A and Annexure A1 of the PAM)

The Post Provisioning Norms (PPN) relate the student intake of a school to the number of personnel distributed by the state to that school. It has a direct effect on both embodied cultural capital available to organise teaching, as well as timespace implications for class size and total personnel hours available across the staffing contingent.

Minimum duties for educators (Chapter A and Annexure A2 of the PAM)

The description of the average school day and the duties educators must fulfil within this timeframe are also of interest to this study, as these provide a legal framework for timespace use in schools.

Both these extracts from the PAM are available in Appendix L.

Provincial level enactment: WCED circulars on post distribution models.

Post distribution, whilst governed by the PAM, is enacted at the level of the Provincial Education Department (PED). Western Cape Education Department Circulars 0028/2017 (Western Cape Education Department, 2017) and 0031/2009 (Western Cape Education Department, 2009) (see Appendix P) stipulated the official provincial position for post distribution in the Western Cape for ordinary public schools at the time of this study. These circulars were brought into conversation with the PED post numbers at each school and how this enabled or curtailed timetable qualities.

National Norms and Standards for School Funding

Although the number of staff available at schools is also influenced by the funding policy, this is discussed in detail under “With what?” to avoid repetition.

4.4.1.2 Whom?

The key policy regulating student intake for schools (which brings various forms of *cultural capital* along with *economic capital* in the form of fee-paying capacity) is the Admissions Policy for Ordinary Public Schools (APOPS) (Department of Education, 1998b), a set of regulations promulgated in terms of the National Education Policy Act.

The South African schooling system is marketized (in response to the racially segregated arrangements of the apartheid state—see Chapter One), and admissions decisions tend to fall to schools to strategize how to fill their quota of students from the applications they receive. The admissions policy outlines how schools should go about defining their

individual admissions requirements, and also regulates what forms of selection may *not* be used.

The Admissions Policy for Ordinary Public Schools (APOPS)

The APOPS details the administrative processes and documentation for admission, as well as regulations about student age and repetition, special needs and students without citizenship.

For the purposes of this study, the following sections of the APOPS were excluded:

- Sections 19-21, dealing with non-citizen students, since the vast majority of students in each school examined were South African citizens, and any non-citizen students did not shape the timetable properties.
- Sections 22-25, dealing with students with special education needs (SEN), since there was no evidence on the timetables at either school of SEN being a feature of timespace arrangement for each school.
- Sections 41-42, dealing with home schooling.

As with the policy on personnel, the admissions policy was examined both for how it availed forms of capital to schools, as well as how it envisaged ideal timespace-conceived for schooling.

Provincial level enactment: WCED circulars on student admissions.

Circular 0040/2016 (Western Cape Education Department, 2016a) from the WCED detailed the timelines and policy frameworks for ordinary public schools in the Western Cape regarding admissions in 2017 for enrolment in 2018 (the year in which fieldwork for this study was conducted). This circular is of interest as it details the WCED's expectations of time sovereignty and planning horizons in ordinary public schools which do not play out in practice.

4.4.1.3 What?

The curriculum subjects to be scheduled in the timetable may seem an overly ambitious policy to analyse, given its depth, breadth and complexity. There is, however, one key document that sets the bones onto which subject content is grafted for the whole school curriculum: the National Policy for Promotion and Progression Requirements (NPPPR) (Department of Basic Education, 2012), one of the three key policy legs of the Curriculum Assessment Policy Statements (CAPS).

The NPPPR outlines for each phase of schooling which *combinations* of subjects are legitimate for progression to the next phase. It delineates the compulsory phase of schooling (the General Education and Training, or GET, phase: Grades R to 9) from the non-compulsory phase (Further Education and Training, or FET, phase: Grades 10, to 12). The NPPPR also describes the *minimum attainment level* for each subject to be considered for progression, and what elective subjects schools may offer at the FET level for students to choose in order to gain access to tertiary education.

These permutations of subjects are critical for timetables in schools, particularly secondary schools such as those examined in this study. Subject offerings affect not only the prestige of schools' final school-leaving examination results, but also interact with admissions policies. Specialist schools will insist on students taking certain subjects that form the school's core focus, using these subjects as a form of cultural capital selection.

Schools and students also both strategize to maximise the symbolic capital from each other: students wanting to pursue particular types of tertiary education will seek schools that offer the subjects they require to do so; simultaneously, schools will strategize subject offerings to maximise overall pass rates, by offering as many 'high stakes' subjects as they can (such as mathematics and the natural sciences) without compromising throughput.

The National Policy for Promotions and Progressions Requirements of the National Curriculum Statement (NPPPR)

Analysis of the NPPPR, and how schools interpret it to 'maximise profit' in Bourdieusian terms, will shed light on the combinations and relative weight attributed to subjects in the timetable arrangements of a school, including rooming arrangements and staffing priorities.

Of particular interest to this study are:

- Chapter 1 of the NPPPR, outlining the purpose of the policy
- Chapter 2, Section 3, governing the **duration** of the GET phase of schooling.
- Chapters 5 and 6, which detail the
 - Approved subjects
 - Programme requirements
 - Promotion requirements
 - Assessment criteria
 - **Time allocation**

...necessary for the final two years of the GET phase, (also known as the 'Senior Phase': Grades 8 and 9) and FET phase of schooling, both of which are both the responsibility of secondary schools.

- Chapter 6 also outlines the **duration** of the FET phase (Grades 10-12), the entry requirements for this phase and the legislation governing subject changes in the run up to the National Senior Certificate examinations at the end of Grade 12.

These very specific durations, time allocations, subject combinations and rules about students' subject selection and changes have deep reaching implications for the activity of timetabling.

As will be discussed in Chapter Six, curriculum is the one strand of the five which has little to no provincial input.

4.4.1.4 With what?

This strand directly bears upon the explicit economic capital schools can access to organise routine teaching and learning. While the who and whom strands (teachers and students) are the parameters that regulate access to cultural and social capital, with what refers to economic capital which may be exchanged for other forms.

The funds that schools can leverage to run their daily operations comes from two sources: the state, and private supplementation—see Sayed & Motala (2009) and Motala (2005) for more detailed discussions of the origins of this division.

The nature and quantity of state provision, as well as access to private supplementation, are regulated by the norms and standards for school funding and the SASA. Schools' ability to charge and collect fees form the bulk of private supplementation. Fee-charging and collection practices are examined in the study for their effects on each school's timetable. These are then related to the admissions practices of the school, as enacted within the (marketized) field of ordinary public education in South Africa as a whole.

The National Norms and Standards for School Funding (NNSF)

Five texts in total formed the policy suite that shaped access to economic capital for the two schools examined in this study for the period under examination:

- the core NNSF policy (Department of Education, 2006a)
- the annual amendments of the NNSF policy (Department of Education, 2007, 2008, 2009; Department of Basic Education 2010, 2011, 2013b, 2014, 2015, 2016a, 2017, 2018, 2019)
- one chapter from the SASA;

- one set of fee exemption regulations (Department of Education, 2006b); and
- two provincial circulars (Western Cape Education Department 2016b, 2018).

The South African Schools Act, Chapter Four: Funding Public Schools

Sections 34-44 of the SASA govern the origins of economic capital for ordinary public schools, and the spread of responsibilities between national, provincial and school governing bodies for distributing, regulating and managing this capital. This includes the legal frameworks schools must utilize to process unpaid fees and fee exemptions.

The National Norms and Standards for School Funding

The main document forming the school funding policy referred to as the 'NNSF' shares this name. The following sections were analysed from the NNSF (2006):

- Section 1: Introduction
- Section 2: Policy framework
- Section 4: Capital cost allocations to public schools
- Section 5: The school allocation
(omitting Sections 146—150 regarding school hostel funding)
- Section 6: Fee exemptions in public schools

Each of these chapters was analysed for how schools are allocated capital, as well as how timespace is conceived in this allocation.

Subsections of the NNSF document are annually amended, specifically the allocation per province based on the relative wealth-profile of the schools in that province, the wealth-related per learner allocation, and the no-fee threshold (for the poorest 60% of schools). All annual amendments since the implementation of the NNSF were considered up until the year of the study (2018).

Regulations for the Exemption of Parents from the Payment of Schools Fees

In addition to the NNSF and Chapter Four of the SASA, the regulations about how schools calculate fee exemptions—and how parents are adjudicated as qualifying for exemptions—were considered. The management of fee income in light of these regulations has significance for securing reliable economic capital for fee-charging schools.

Provincial level enactment: WCED circulars on funds allocations.

Although funding policies and volumes are decided at the national level, the distribution of funds to schools is organised by the provincial education department. This sharing of responsibility for basic education is enshrined in the South African Constitution (Republic

of South Africa, 1996) which distributes powers between national and provincial government. Provincial authorities are guided by the per learner allocations stipulated by the national department, but may deviate based on their own budgetary constraints at the provincial level.

WCED Circular 0041/2016 outlines the financial allocation to schools for the financial year 2017/2018. WCED Circular 0005/2018 outlines what recompense is available to schools who have students exempt from paying fees. Each of these circulars was analysed for its effects on availing forms of economic capital to schools and the timeframes of capital availability.

4.4.1.5 Where?

Finally, the last strand of timetable parameters is that of spatial arrangements in the school. This strand has two aspects: firstly, the quantities and qualities of the infrastructure at the school site itself; and secondly the geographical location of the school in a spatially segregated neo-apartheid landscape. The former is currently weakly regulated by the recently promulgated Minimum Norms and Standards for Schooling Infrastructure (MNSSI) (Department of Basic Education, 2013a), a policy that results from a protracted court case between the non-governmental organisation Equal Education and the Department of Basic Education²². The schools selected for this study already satisfy these minimum norms and standards (see "School site selection").

Infrastructural norms and standards for schools are the weakest of the five strands in terms of reach. Existing school spaces are primarily a function of historically bequeathed infrastructure, combined with what spaces can be developed with capital sourced from private supplementation (with what). Schools in need of infrastructure must attempt to press 'upwards' towards the state bureaucracy for provision of improvements and upgrades to existing buildings and grounds, but such pressure is hard to enact in the top-down bureaucracy that is the existing education policy terrain. In terms of policy reach, then, this strand reaches mostly through non-enactment by the state.

The second aspect of where, namely geographical location, is also of significance in this study. Geographical location predicts the type of infrastructure that schools have inherited from the apartheid era (see Jacklin, 1991; Jacklin & Graaff, 1994) and hence historical school building policy plays a more significant role than current legislation. School

²² See Minister of Basic Education and others v Equal Education and Amatolaville Primary School (2018) for the Constitutional Court judgment dismissing the Minister's appeal against the High Court findings on schooling infrastructure norms and standards.

catchment zones, outlined in the admissions policy, are then also related to where: this section of the admissions policy is considered for how schools can or cannot deploy zones to reduce over-subscribed application volumes with spatialized selection.

4.4.2 How policies were analysed

The suite of policies described above is a vast tract of texts, even once non-applicable subsections have been eliminated. For each strand, the extracts identified in national documents were thematically analysed for how they either regulated access to various forms of capital, or shaped (through prescription or assumption) how schools organise their timespace and timetables. Provincial level documents were then similarly analysed against the national policies. Finally, the threads were traced back to the level of the school, detailing how policies were enacted contextually at this level and the effects on the capitals available for timetable development.

The next section describes how rhythms were traced forward from timetables into the everyday timespace-lived of schools.

4.5 Everyday rhythms

The final layer of analysis examines how timetables in each school were enacted i.e. how the timespace of the school was actually lived, and also experienced, by the actors therein. Of interest here is whether the ideal timespace-conceived in the timetable and the reality of rhythmic timespace-lived in schools is closely coupled or divergent.

4.5.1 What was examined: school rhythms and timespace-lived

Both structured and open-ended data was collected about school rhythms and how the timetable was (or was not) enacted in each school studied.

4.5.1.1 Systematic observation: timetable adherence

Systematic data about timetable *adherence* was gathered for each school for a period of a contiguous week at each site. This data was collected mid-term to avoid interference from settling or assessment. Data production involved coding the use of each room in each school for each lesson over the period over the week, which was then compared to the timetable's specification for room use and activity, and discrepancies were explored.

Deviance in practice from the intended timetable was colour coded to explore the *degree* of deviation without artificially quantifying change (since the difference between the timetable enacted and timetable intended does not readily lend itself to quantification).

Changes to lesson arrangements might include a substitute (or absent) teacher, a room change, students out of the class (for education or non-education purposes) or cancellation of the lesson entirely. Changes might also be pre-planned, or responding to an unexpected event. The following colour schema was used to code the lessons from each school in a timeline format where one axis represented time and the other space, creating a timetable adherence infographic for each school:

- Light green: home-room²³ teacher in the scheduled room at the scheduled time.
- Dark green: timetabled teacher in the scheduled room, but not the home-room teacher (room sharing)
- Yellow: room change not reflected on the timetable (scheduled or otherwise)
- Orange: substitution (e.g. if the normal teacher is absent due to illness)
- Red: lesson doesn't happen at all
- Maroon: teacher called out of class (for a significant portion of the lesson) for another duty/responsibility
- Light blue: off-timetable activity for one class (e.g. a school outing)
- Dark blue: whole school off-timetable for pre-planned event.
- Lilac: Could not obtain data
- Grey: different from timetable but reason unclear
- White: Room empty as per timetable

This schema was used to produce visual impressions of the rhythms of timespace-lived and how it related to the timespace-conceived of the timetable. The use of colour allowed for conveying large quantities of data visually. In addition to the colour, the height of the cells used to represent one lesson were adjusted to be proportional to the lesson length in minutes. That is: a 30 minute lesson was made 30 pixels high; a 50 minute lesson, 50 pixels etc. This was designed to achieve a visual impression of regularity or irregularity in the timetable granularity at each school.

Systematic data produced with this method for each school was heavily subsidised with qualitative evidence, including photographs, school organisation documents, detailed qualitative observations and further interview data.

²³ 'home room' here means the teacher allocated as the custodian of that particular class room i.e. that room is that teacher's 'home' room.

4.5.1.2 Observational data

Throughout the fieldwork period, detailed notes were made of happenings and events around each school, including student interactions, the soundscape²⁴ of the school, how students and staff moved through the school space, the agendas and discussions at assemblies and staff meetings, as well as how objects and information were stored, moved, and used around the school. External factors were also noted, including traffic and transport conditions, weather and temperature.

These observations intended to capture the qualities and textures of timespace-lived that could not be represented through the systematic coding of timetable adherence. While the infographics produced for each school explored certain aspects of timespace-lived, they could not capture the complexity of everyday life.

Each observation was recorded with dates and timestamps, and thematically analysed for evidence using the concepts identified in Chapter Two. A total of 1 108 observation records were analysed to texture the systematic data produced by coding room use against the timetable.

4.5.1.3 Interviews

In addition to interview questions to the principal, timetabler and person responsible for finance, school observations posited two further areas of interest in everyday rhythmic activity: student discipline and infrastructural maintenance.

Student discipline became an area of interest as it played out in the regulation of student movement around the school in compliance with the timetable. Data was gathered about how school discipline procedures related to timespace regulation and timetable adherence. To support observational evidence (e.g. detention practices) and documentary evidence (e.g. detention lists and suspension notices), interviews were conducted with the teachers who oversaw student discipline for their perspective on the origins of timetable deviation and deviance on the part of students.

Infrastructural maintenance became noticed as a rhythm which availed spaces for teaching and learning. The person in charge of maintenance was interviewed for further insight into how the school funded grounds work and maintenance, and what guiding principles were

²⁴ Sound emerged as a useful rhythm detection technique: while 'seeing' everywhere in the school at all times was not possible, the soundscape of the school transcended visual barriers and walls. The general energy of the school was often related to the form and volume of the sound evident at key areas of activity within each school site. Shifts in the soundscape of the school often indicated shifts in activities.

used to prioritize tasks. Discussion around maintenance included forecasting future capital expenditure on new spaces as well as the qualities of existing spaces.

All interviews conducted (the principal, timetabler, and persons in charge of finance, discipline and maintenance) were transcribed in full, then thematically analysed using the concepts from Chapter Two.

4.5.1.4 School notices and documents

Both schools availed administrative documents and notices for examination. In addition to the main school timetable, supplementary documents included:

- Substitution notices
- Codes of conduct
- Information regarding school events
- Student enrolment data
- Staff notices
- Student notices
- Assessment schedules (where applicable)
- Departmental timetables (where different to the main timetable)

These documents were used to supplement descriptions about timespace-lived, as well as to analyse how the movement of people, objects and information constituted rhythms about the school.

4.5.1.5 Evidence of actors' experience of the school timespace

For timespace-perceived, wall adornments, codes, and signs around the school were also recorded throughout the observation period for evidence of how actors in the schools viewed their place of work or learning (this included, for example, student-led organisations' posters and activities, or graffiti and litter). Included in the school mapping data described earlier was an exploration of 'unusual' school spaces that offer opportunities for different understandings and interpretations of the school's lived timespace e.g. quiet corners of the playground, smoking corners (for staff and students), corridors behind bathrooms or basement cupboards. Interactions between students and teachers were also noted where these were relevant to timetable adherence, timespace-lived and rhythm (e.g. student late-coming).

4.5.1.6 Satellite timetables

While satellite timetables could be considered timespace-*conceived*, the primary interest of this study is the main timetable that sets the rhythm of the school. Satellite timetables (secondary timetables that respond to, or integrate around, the primary school timetable) were hence seen as more indicative of schooling *practice*, in which activities deemed 'additional' or 'supplementary' would be aligned with the rhythm of the primary tempo set in the main timetable. However, where satellite timetables were integrated into the main timetable, these were analysed with the main artefact.

Satellite timetables included: extra mural activities (sports, music, cultural activities); special events (sports days, prize giving events, school outings, parents' evenings); disciplinary schedules (teachers' playground duties, detention duties, late-coming duty, grounds patrol); administrative rhythms (marks deadlines, report dissemination dates, textbook distribution, fee collection, departmental planning meetings, school governing body activities); and assessment schedules.

The degree to which these were imbricated with, or antagonistic to, the main timetable was also seen as suggestive of the presence of eurhythmia or arrhythmia at the school. Notices and schedules describing these satellite timetables, their changes and the adherence to them by students and staff, were also recorded throughout the observation period as far as was feasible.

4.5.2 How rhythm was analysed

Getting a handle on rhythms at the level of the school proved a significant methodological challenge. Such practicing is not premised on rules and *a priori* knowing (as explored earlier with Bourdieu). Rather, a practice-based approach "assumes that knowing precedes knowledge, both logically and chronologically, for the latter is always an institutionalized version of the former." (Nicolini, 2003, p.3).

Scholars at work in this area investigate the theoretical implications and practical consequences of this depiction of organizational knowing as situated in the system of ongoing practices of action in ways that are **relational, mediated by artifacts** (sic), **and always rooted in a context of interaction**. Such knowledge is thus acquired through some form of participation, and it is continually reproduced and negotiated; that is, it is always dynamic, and provisional. (ibid.)

Working from the base premise that practical doing is mostly pre-cognitive and unexamined, data collection on how timespace was lived and conceived in rhythmic doing around each school could not rely on actors' retro-fitted narratives alone of what they did (or why).

The analytical structure of 'who taught whom what, with what and where' also did not map neatly onto everyday activity and rhythm. Rather, structured observations systematized how activity was recorded for comparison to the timetable, although it could not capture subtleties, ebbs and flows in rhythm. Unstructured observations focused on noticing rhythms (including absence as well as presence—see Scott's (2018) discussion on the 'sociology of nothing'), and relied on repeated, prolonged observations to verify or falsify impressions of rhythm. In addition, the use of *sound* to detect whole-school rhythm was used, since visual observation of the entire school was not possible.

Interviews were conducted towards the end of fieldwork to verify or trouble impressions of school rhythms through questions and discussion. The supplementary documentation gathered, and its form and availability, also supported or refuted any rhythmic schemas during fieldwork.

The data produced for the timetable, policies and rhythms under examination have been described at length, using the five stranded model developed through the chapter to trace connections through timetables back into policies, and a rhythmic lens to examine timespace-lived as compared to timespace-conceived. Prior to describing site selection and fieldwork, a brief comment follows to relate these forms of data to the research questions from Chapter One, and the conceptual framework from Chapter Two.

4.6 Relating data to the research questions

To ensure coherence from the research questions, through the conceptual framework into the analytical framework and data described, Table 4.3 below relates the data sources to the research questions from Chapter One and the concepts developed in Chapter Two.

For ease of reference, the research questions posed in Chapter One were:

1. What differences are visible in the timetable of a fortified secondary school compared to that of an exposed school?
2. How do these shape rhythms of teaching and learning?
3. How, in turn, are these shaped by key resourcing policies?

Data source	Related research question(s)	Conceptual tools	Analytical tools
Timetables	What differences are visible in the timetable of a fortified compared to that of an exposed school?	• Timespace-conceived • Forms of capital	• Elasticity, granularity, modularity • Five strands of timetable input
Policy texts	How are the properties of timetables shaped by policy?	• Timespace-conceived • Field • Forms of capital	• Five strands of timetable inputs • Thematic analysis for forms of capital and timespace-conceived
Observations and notices	How do the rhythms of teaching and learning in the school relate to the timetable?	• Timespace-lived • Timespace-perceived • Habitus • Dressage • Doxa • Eurhythmia /arrhythmia • Repetition and difference	• Coded observations for timetable adherence • Thematic analysis of qualitative observations
Interviews	How are the properties of timetables shaped by policy enacted at various levels? How do the rhythms of teaching and learning in the school relate to the timetable?	• Doxa • Dressage • Timespace-lived • Timespace-perceived • Forms of capital	• Thematic analysis of qualitative interviews • Cross-referencing of interview responses with notices, observations and timetables
CEMIS	<i>Further substantiation of fortified/exposedness</i>	• Field • Forms of capital	• Relate symbolic capital to rhythms and other forms of capital

Table 4.3 Relating data types to research questions and concepts of the study.

The next section describes how schools were selected for the study, detailing the fieldwork schedule as it unfolded and what challenges were met with data production.

4.7 School site selection and rationale

The school sites selected for this study needed to comply with several specific criteria to be judged as appropriate for examining the effects of the policy strands identified. The model thus far developed, namely who teaches whom what, where and with what meant that specific criteria were required of each school site to make comparisons across these strands attributable to policy.

Two **mixed gender secondary** schools (Grades 8 to 12) **with fee charging capability** were chosen. In addition to these criteria, both schools had **no specific feeder primary schools**, were built by the **same apartheid era department** and were of similar age, and had the **same quintile designation**. The schools also enrolled a **similar number of students** (one had just over 900 students registered, the other just over 1000). But: one school could be considered fortified and one could be considered exposed based on their school leaving results. The reasons behind these criteria warrant some justification.

4.7.1 Choosing secondary schools

This study chose to focus on secondary schools specifically, since it is in secondary schools that the effects of student admissions (whom) are felt and seen most keenly. This is particularly the case with secondary schools that have not officially been attached to primary feeder schools, although informal connections between primary and secondary schools often arise out of a shared geography and community.

Secondary schools also feel the pressure of national senior certificate results in ways that primary schools do not. That is: the what of timetabling becomes far more complex at the secondary level, not only due to student subject selection, but also from pressures upon the school to maximise examination results in final assessments (and to offer subjects that maximise these results). Secondary schools, then, are caught between the selection of cultural capital through the students they admit, and the production of symbolic capital through independently assessed NSC results.

Secondary school teachers are also subject specialists, making their cultural capital less transferable across curriculum areas compared to primary schools (where teachers are generalists teaching across curriculum areas). The task of timetabling in secondary schools is more constrained between staffing—the who—and curriculum.

4.7.2 Choosing mixed gender schools

The study also chose to focus on mixed gender schools so that discrepancies in rhythm and practice across the schools could not be attributed to gender differences (as would be the case if the schools served different gender groups), or rhythms be attributed to gender-specific practices (as would be the case if both schools served the same single gender student communities).

4.7.3 Choosing schools with fee charging capability

As will be explored in more detail in Chapters Six and Eight, fee-charging schools represent the broadest range between fortified and exposed, depending on what supplementary income they can command. For the purposes of comparison, the study examined two schools that had the same *potential* to supplement state provision of capital but who were differentially enacting that potential (with what). That is: both schools were classified as being relatively wealthy, and hence allowed to charge fees, but also given the minimal state support over and above teachers' salaries. Selecting in this manner offered the opportunity to see how the **same policies** played out **differently**, depending on schools' context, geography and historical results, and how this interaction of field position and policy in a marketized schooling system reproduces (dis)advantage. By focusing on two schools with similar historical groundings, the differences that now exist between them could also be more credibly attributed to current policy arrangements, rather than historical inequality.

4.7.4 Choosing schools with similar forms of inherited infrastructure

Both schools were formerly House of Assembly schools (i.e. schools that served White children under the apartheid era), although their student demographics have rapidly diverged in the present moment. Given this shared history, both schools were built to similar specifications architecturally (the local where) and also located in formerly Whites-only areas (the geographic where): what differences exist now in their material spaces speak to the adequacy of each school's access to various forms of capital (with what enmeshed with where).

4.7.5 A telling rather than a typical case

By selecting two schools that could supplement state provision through fee collection, the study also set up the problematic of the adequacy of public capital provision for the broader field. Data collected from any exposed school site struggling to collect fees would also speak to the context of schools forbidden from charging fees (see 'generalization' later in this chapter, and Chapter Eight, for further discussion of this).

The two schools chosen for this study sit narrowly astride the dividing boundary between fortification (the small minority of schools in South Africa) and exposedness (the vast majority of schools in South Africa). Studying the rhythms of two schools slightly either side of this tipping point will speak to the rhythms of schools even more exposed or fortified than the ones examined here.

4.7.6 Working in the Western Cape

One concern regarding the effects of policies on schools' timetables is the mediation of resource regulation and distribution at the level of the province (see Figure 4.7 for a description of the levels of decision making in the South African public basic education system). Provinces struggling to fulfil their role (e.g. in post provisioning, staff distribution or non-personnel funds administration) would be inappropriate for research of this nature, since shifts in school rhythms could not be cleanly attributable to the *content* of policies as opposed to provinces' challenges in enacting them.

Working in the Western Cape for this study, then, was appropriate and necessary for the questions under investigation. This province has been adjudicated as highly compliant with policy and governance structures (Levy et. al., 2018), and the distribution of various forms of capitals to schools is in keeping with policy guidelines. What differences exist at the level of the school can be attributed to the effects of those policies' *content* as they land in the school's context, without distorting interference from practices and enactments at the level of the province.

By ensuring consistency across potentially confounding factors (gender, historical infrastructure, quintile, province, geographic location, different phases of schooling), the analysis presented in the study is far more plausibly attributable to the differential enactment of key resourcing policies in context.

Confounding factors in research are not limited to irreconcilable differences across study sites. Logistical challenges also present potential threats to the integrity of the study's findings. The next section discusses the logistical arrangements for the study and what challenges arose.

4.8 Data collection: design considerations and challenges

Having outlined what data was collected, and how appropriate schools were identified, the remainder of the chapter outlines the logistics of fieldwork, challenges in executing collection plans, and validity, reliability and ethical considerations for the study.

4.8.1 Fieldwork schedule

Over 75 hours of observations were conducted in each school (75.5 in School A, 76 hours in School B). Observation times were scheduled so as to pay attention to different aspects of the school's multiple rhythms over the day, week, and term.

To establish how rhythms ebbed and flowed, each school was visited in equal proportion starting from the first day of the academic calendar in the first term until the last day of that term.

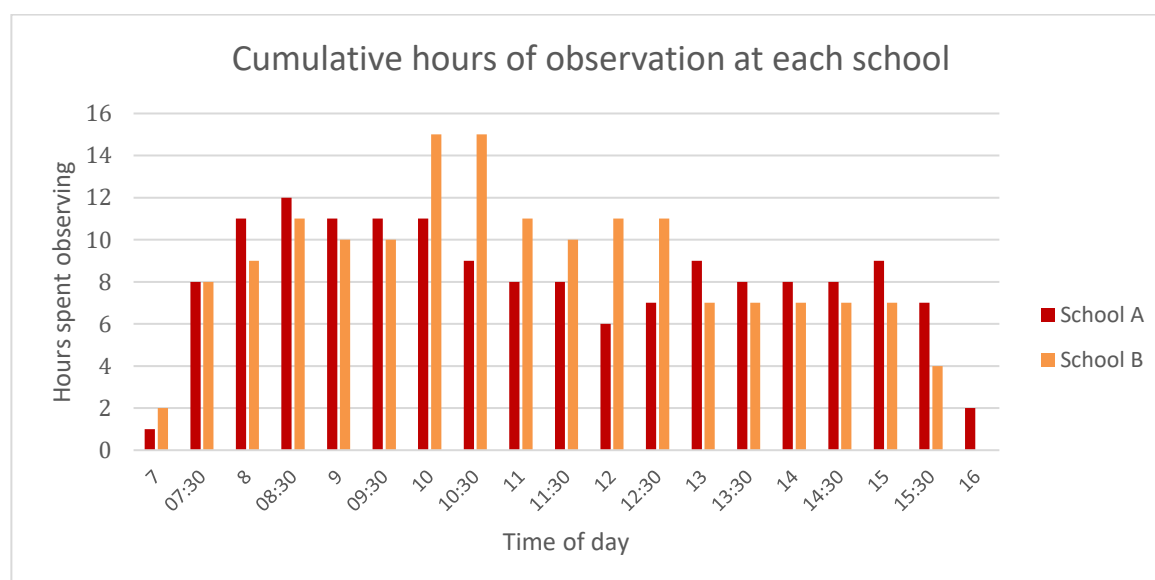


Figure 4.8 Cumulative observation hours at each school as distributed throughout the school day

Figure 4.8 shows that data collection was relatively even over both schools and over the school day, to capture differences in rhythm across the day's activities (see also Appendix H for the distribution of observation time across both sites throughout the term).

Observation and data collection needed to begin from 'Day One' of the school year: the beginning of the academic calendar presents the window for setting school rhythm for that year, where students and teachers receive the timetable and begin to organise their activities around it. Evidence was also gathered about rhythm establishment, how timetables were distributed, and how stable and reliable the timetable was for those who used it.

Throughout the first term, both schools were observed daily for rhythms regarding:

- term start, middle and end;
- week start, middle and end;
- day start, middle and end.

4.8.1.1 Collecting systematic data for timetable adherence

Once the term had settled and each school had reached 'peak rhythm' (i.e. the main flow of the term where neither teething issues nor end-of-term assessments could interfere with the main timetable's schedule), systematic timetable adherence data was collected over five consecutive whole school days at each school. This data was collected in weeks five and six of an eleven week term.

In the weeks prior to this, pilot rounds of the systematic coding procedure were run on several occasions at each school to ensure the coding method was physically viable and sufficiently thorough. Minor adjustments were made where necessary. These partial rounds also further informed the impressions of rhythm and what was 'normal' at each school.

4.8.2 Data collection challenges

Data collection for the study was not without challenges. Two types of obstacles arose during fieldwork: the intensity of data collection and school reticence.

4.8.2.1 Fieldwork intensity

An unforeseen challenge while conducting the study was the physical effort required to collect so much data across two school sites in only eleven weeks. Completing school rounds for systematic coding of timetable adherence entailed 6km a day of walking at School B, and 10km a day at School A (a more spread out campus). This was in addition to qualitative notes and observations and trying to 'keep noticing' even once each school's environment became familiar. Unfortunately, one day of the full-week systematic data collection at School B was missed due to ill health.

The second challenge regarding intensity was the impossibility of being 'in all places at once' across whole school sites. Observations were distributed across different areas of the school, with maps used to ensure total site coverage over the period of observation. Sound proved to be a useful indicator of general whole-school activity where gaze was insufficient (see "Everyday Rhythms" and Chapter Seven for how the school soundscape was utilized in data production).

4.8.2.2 School reticence

A second challenge to data collection was schools' understandable reticence to the presence of a strange observer. The degree of reticence was tightly aligned with the sense of exposedness. School A had clearly become accustomed to researchers and barely noticed an additional strange adult moving around the school. But School B had negative prior experiences of participating in research, and expressed an understandable wariness to admit observers in light of this. Several students and teachers at School B mistook the research for an inspection, and several conversations were had about the non-normative nature of the research in terms of evaluation or monitoring.

At School A, significant volumes of data could literally be read off the walls. But School B made far less use of hard-copy printed notices and information dissemination (See Chapter Seven). This, combined with the aforementioned reticence, made data collection at School B significantly more challenging than at School A, as information had to be explicitly asked for, and often more than once (staff were extremely busy with daily school duties, and researcher requests were appropriately less of a priority). Interviewing the head of maintenance at School B was attempted on several occasions but kept being postponed (see Chapter Seven for reflections on this). However, significant information about maintenance at School B was obtained from the deputy in charge of finance.

Fortifiedness and exposedness could also be seen, then, as descriptive of the sense of vulnerability at each school. The fortified site, School A, was sufficiently confident of its work and rituals that the presence, or opinion, of a researcher was not of particular consequence. School B, on the other hand, felt exposed and vulnerable, and a strange—potentially evaluative—presence was seen as a potential threat.

Such challenges raise questions regarding the completeness of the data. In the case of the systematic data, four of five days for School B still presented a representative snapshot of the school's rhythm, and was further confirmed by other partial rounds conducted during the pilot. What information was not available through print notices at School B was obtained through interviews and a short teacher survey distributed in a staff meeting. That is: while data was not obtained in the same format across both sites, alternatives were found where necessary to fill data gaps when required.

Data completeness is not the only credibility risk to the study. The next section considers questions of validity and reliability in relation to the types of data chosen, and how they relate to the research focus of the study.

4.8.3 Validity and validity threats: how credible are the accounts given?

Drawing on Maxwell's work (2012, 2008, 1992) on considerations of validity in qualitative research, the guiding question regarding issues of validity for this study was: how could the account be wrong?

Shadish, Cook and Campbell's (2002) take the position that validity is not a function of choosing 'the correct procedure' irrespective of the question at hand, but that considerations of a research account's credibility are a function of the conclusions it draws *against* the methods used, the questions asked, and the context of the situation studied.

The approach taken to deliberating these concerns is, as Maxwell suggests, framed in the negative. Rather than considering whether the method is valid for the question asked and the context of asking, the presence of *validity threats* for the study are examined by asking 'how could the account be wrong?'.

Maxwell identifies five types of validity in qualitative work (2012, 1992) and how threats for each might be identified. The different validity types—descriptive, interpretive, evaluative, theoretical, and valid generalizability—bear down unevenly on the different methods used in this study. Validity threats are explored for each of these five types, along with which *aspects* of the study they applied to, and how these were (or weren't) mitigated as the data was produced and the analysis progressed.

4.8.3.1 Descriptive validity

Maxwell describes 'descriptive validity' as the accuracy of accounts to events, objects and behaviours. He lists the *validity threats* to descriptions as researcher bias, selective consideration (or collection) of data (otherwise known as 'cherry picking') and faulty memory.

Descriptive validity differs across the various forms of data collected for this study. Each data type is discussed in detail below, along with how descriptive validity threats applied.

Timetables

The main timetables of each school were total and complete, and analysed methodically, considering all lessons, all subjects, all teachers and all rooms. All the timetables examined were analysed using a spreadsheet to codify each aspect of the schedule completely. After coding, random data points were selected and cross-referenced to verify capture accuracy.

Policies

Similarly, the policy documents were considered in their entirety and all the relevant sections pertaining to timetabling inputs were considered, with clear rationales for exclusions. The five-stranded analytical framework described earlier was deployed to identify the relevant sub-sections, by asking how the policy affected the who, whom, what, with what and where of schooling.

The impossibility of a universal gaze withstanding, the claim that these forms of data were as complete as possible, and not selectively gathered, is credible. The approaches used limited the risk of overlooking relevant aspects of the data.

Observations

For observations, the validity threat of selective consideration posed more of a challenge. To this end, the observations conducted were done in such a manner as to ensure that:

1. each school got the same types of observations at the same times, dovetailed together to ensure similarity across both sites (See Figure 4.8 and Appendix H for the schedule of observations over both schools)
2. each school's site was observed using instruments that ensured all teaching rooms were covered and the canvassing of each lesson during structured observations was total. A school site map was also used at each school to ensure coverage. Where data was not obtained, this was not omitted from the infographics produced, but represented as 'unknown'. At regular points during field work, the 'negative case' (Maxwell, 2012) was considered by asking 'which parts of the school have gone ignored? What relevance does this have for the data?'
3. Drawing again on Maxwell and others, the threat of selectivity to the description provided was mitigated by prolonged involvement over a period of eleven weeks at each school. Whereas the maps and instruments describe were used to mitigate spatial selectivity, prolonged involvement was an attempt to curb descriptive validity threats around temporal selectivity i.e. only seeing each school for a short and/or specific time.

Interviews

Threats to descriptive validity regarding interview data are less easily dismissed. Interviews were totally transcribed verbatim to ensure no selectivity regarding content. Interview analysis was two-fold: each utterance was first considered for concerns about leading questions or performativity (the sensitivity of the question), and the content of the response treated as trustworthy in accordance with whether there was a risk to its veracity (this also applied to 'interpretive validity'—see below).

After concerns of performance or bias were considered, then the content of the response was related to the conceptual framework for the study, attaching core concepts to the evidence provided by the interviewee. If the statement was considered to be at risk of a descriptive inaccuracy for any reason, then the content of the statement was cross referenced with other data that could assist in verifying or refuting its veracity, and—if necessary—excluded from the analysis or treated as untrustworthy.

CEMIS data

Descriptive validity threats to the CEMIS data are not particular to this research, but apply to any enquiries that draw upon government records of schooling practices. There are two types of data from CEMIS which differ in their veracity. The first, demographic types of data, are relatively trustworthy due to bureaucratic checks and balances. Enrolment figures, staff employment figures, quintile designations etc. are all relatable to identity numbers, birth certificates, and GPS coordinates, which are required for the system itself. The CEMIS system requires its own data to be credible, and has internal structures to ensure this.

The second type of data is assessment data i.e. the results used to assess learning internally within the school and externally against qualification authorities (the National Senior Certificate results). The descriptive validity of these results against student's actual scores and skills are moot for this study, since the results are what shape the field of education, not the phenomena they profess to describe. Assessment results alone constitute the symbolic capital that shapes schooling practice, and while assessment validity must be present to sustain the value of that capital, the system itself attempts to provide the necessary checks and balances to ensure that assessments are 'sufficiently' valid so as to be accepted by the field at large. Since actors' strategies in the field of education are premised on the results, these can be taken at face value as shaping of meaning within the practice of schools.

4.8.3.2 Interpretative validity

Maxwell (1992) describes *interpretative validity* as the accuracy of the accounts of participants' perspectives about the phenomena the study is investigating. While the focus is peripherally concerned with what events, behaviours and objects meant to the actors in the two schools studied (timespace-perceived), meaning-making is not the primary focus of the study. Meaning-making makes the third leg of the practice theory triad along with structures and activities and hence must be considered; but timetables and their relation to rhythmicity of teaching and learning is only textured by, and not premised on, meaning. This positioning of meaning in the study is evidenced by the amalgamation of 'timespace-perceived' and 'timespace-lived' in the final chapter on the everyday in each school.

Two of the data sources collected provided insights into subjective experiences of members of each school's community. Firstly, the unstructured observations of the school space and the actors within it (including altercations and events between actors, and symbolic evidence of actors' subjective experiences e.g. desk and wall graffiti, or the absence thereof). Secondly, meaning was expressed in the opinions and interpretations offered during interviews about *why* each school does what it does i.e. the logic behind their practice, from their perspective.

Where interpretations of events or practices were offered by interviewees, and differed from the account developed by the researcher using theoretical lenses, Philipp's (2007) principle was used: namely, that the researcher has an ethical obligation to not dismiss the interviewee's perspective as misinformed, but to excavate *why* such a perspective has come to hold water for the person in question. The concept of doxa assisted in relating individuals' beliefs to the collective shared logic around how best to enact schooling in that school's given context. Using doxa as a frame for the explanations offered by interviewees assisted in relating their interpretations to the other data as part of the description of practice as a whole.

4.8.3.3 Evaluative validity

As described in Chapter One, the study attempts to remain in the realm of the descriptive, and not the evaluative. Accounts provided here are to deepen understanding of schools' differentiated practices and expose potentially under-considered forces that shapes these practices, not to assess the practices normatively. Validity threats of an evaluative nature are, therefore, not relevant to this particular study.

4.8.3.4 Theoretical validity

Theoretical validity questions the appropriacy of the conceptual tools used for the job at hand and whether the researcher has a sufficient grasp of these. Several strategies were deployed to ensure stable and accurate understanding of both Bourdieu and Lefebvre's conceptual toolboxes. These strategies included regular reading groups with other scholars who use these concepts, critical input from informed readers on this study and the use of the concepts with the data, and reading broadly across other texts that have used both Bourdieu and Lefebvre in schooling research, as well as critiques of these.

4.8.3.5 Generalisability

A qualitative study of this nature is not one from which one can generalise empirical findings. However, there are three ways in which this study does offer insights into other schools, and how policy might reproduce inequality in education systems.

The first is a transferable methodological approach. Timetables are found in almost every school, and certainly in public schools. The types of investigations through timetables, as presented in this thesis, might be equally applicable in other schools in different contexts, even if the empirical findings such an approach might produce are significantly different.

The second form of generalisation stems from how the relations between the two schools examined shed light on **the structure of the field** of schooling in South Africa. The axes of difference—and similarity—between the two can be extrapolated to the broader terrain of inequality, where means, language, and historical spatiality predict the degree and form of schools' exposedness (this is explored more using the five strands in Chapter Eight). That is: the relations between these two schools speak to the relations between all South African schools.

Thirdly, the thesis provides a general conceptual contribution which re-roots discursive policy analysis in materiality, through timespace. While policies are enacted and (re)interpreted, such meaning making is not free from encumbrance. By focusing on timespace, policy-enactment relations—and constraints on these—are anchored in the material and the everyday.

4.8.4 Ethics

The ethics restrictions for research mandated to all studies of this nature by the university in question were applied: participants were offered anonymity and the option of withdrawal at any point should they choose to do so. No visual photographic data of students or research sites have been revealed or made public in accordance with the anonymity wishes of the schools. The research and its rationale were made available to any members of the schooling community who wished to inquire, and explained in full to all interviewed participants. Interviewed actors were provided with consent forms explaining the study and the conditions of their participation (see Appendix J). All efforts to protect the identities of the schools in question were made. The findings of the research were presented back to each school for comment. In some cases, interviewees requested certain statements not be included in the study and these wishes were respected.

Beyond the bureaucratic procedures of university ethics criteria, the study has endeavoured to tell the story explored in as non-normative a manner as possible whilst not making false claims to objective 'neutrality'. The concern at issue here is clearly not a neutral one: the rationale outlined in Chapter One takes a specifically normative stance against inequality in the education system. What *does* behave an ethical approach to this research is to make every attempt to understand the logic behind each school's practice and the contextual conditions in which each school adapted and strategized. The study thus focuses on understanding how and why schools came to develop the rhythms they did, without attributing vice or virtue.

The normative focus of the study is, then, on policies that shape unequal access to forms of capital, the effects of these on schooling rhythms, and the *adequacy* of what exposed schools work with, which are examined by comparison with the operations of fortified schools. As explained in Chapter One, fortification is a desirable state for all schools, and a zero-sum mentality in drawing lessons across fortified and exposed contexts obscures concerns of adequacy for all in the public education system. Adequacy and inequality are only reconcilable if approached with a non-zero-sum perspective.

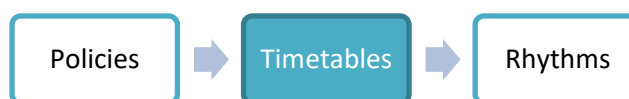
4.9 Conclusion

This chapter has outlined how the study was designed, along with how the data was produced.

A rationale for the schools selected was presented. For each analytical chapter, the data collected and its appropriacy for the issue under investigation was detailed. Issues of reliability, validity and generalisability were considered, as well as reflections on the ethical implications of the study.

An analytic framework was also developed that assisted in tracing the forms of capital necessary to assemble school timetables to their policy roots. Figure 4.7 presented a schematic model of this framework that incorporated levels of decision-making about policy enactment for the South African case.

The next three chapters describe and analyse in detail the data collected. Chapter Five presents an analysis of each school's timetable and the forms of capital available to construct these. Chapter Six then examines the identified key policies that regulate and distribute forms of capital. Chapter Seven then turns to how schools' rhythms and timespace-lived articulated with their timetables as artefacts of ideal timespace-conceived.

5.**Timetables and their qualities****5.1 Introduction**

Timetables are the central axis around which the following chapters articulate. This first analysis chapter starts at this core interface, providing a detailed description and analysis of each school's timetable. The reach of policies into schools *through* timetables comes into focus in Chapter Six as policy texts that constrain forms of capital are examined. Rhythms of teaching and learning in everyday practices—along with their allegiance to the official timetable—are described in Chapter Seven.

The details of each school's timetable are first introduced, foregrounding the qualities of the timetables in terms of *modularity*, *elasticity* and *granularity* as described in the analytical framework. These qualities provide a language of description for the similarities and differences that are constrained by forms of capital, and productive of school rhythms.

These timetable characteristics are then traced to the forms of capital each school has available. Interactions between different strands are teased out where appropriate, using the five-strand model to organise the analysis. The forms of available capital are also used to consider how the school is positioned in the *field* of schooling.

Finally, the chapter closes by comparing and contrasting each school's timetable and how they are differentially shaped by their available capitals. This comparison paves the way to Chapter Six where the roots of these differences are traced into policies that reach.

5.2 School A

5.2.1 School A's timetable

School A's timetable was assembled using an automated spreadsheet application which was developed in Microsoft Excel by a former staff member of the school. By populating the lists of required resources (teachers, rooms, subject clusters) the spreadsheet would generate a colour-coded timetable for the whole week. Included in the calculations were subject department meetings and substitution duties.

5.2.1.1 Granularity

School A's timetable was extremely regular, with each unit being identical (half an hour, or 30 minutes) and hence interchangeable. The 30 minute unit (or period) is also an exact fraction of the time allocation outlined in official curriculum documents (see Chapter Six), making precise curriculum compliance relatively straight forward. Most lessons were, as far as possible, scheduled as double periods i.e. a whole hour, or two periods back to back, to avoid excess churn and lost time to class transitioning (see Appendix B—School A).

In addition to this, the repetition cycle of the timetable ran over exactly five days, ensuring that each week looked identical, and that the weekly cycle and timetable cycle were synchronised²⁵. This granularity meant that lessons could be easily swapped when required to ensure even curriculum coverage if learning got lost to public holidays, school events or unforeseen circumstances.

Despite the ease of total compliance with the mandated 27.5 hours of contact time a week (or 55 half hour periods), School A had opted to only timetable 27 hours, or 54 periods. This meant that school could go out half an hour earlier on a Friday afternoon.

5.2.1.2 Elasticity

School A's timetable exhibited high degrees of elasticity (i.e. built-in redundancy) across both staffing and rooming. The minimum number of free teachers over the week for any given lesson period was seven (this was an unusual moment when several department meetings were simultaneously scheduled—see "Satellite timetables"—meaning teachers not teaching were otherwise occupied). On average, the number of free teachers at any

²⁵ Some schools have timetables with a seven or eight day cycle, which does not synchronise with the weekly structure of the calendar.

point numbered between ten and eighteen. This did not include the principal, or the three teachers allocated as being on 'sub' duty (substitutions in the event of an absent colleague) for these periods. If teachers on sub standby are included, the number of available free teachers ranged from 10 (minimum) to 21 (maximum).

Rooming slack is also evident in the timetable. The minimum number of free rooms over the whole week was two, with the maximum being ten free venues. Certain venues were not 'bookable' for class purposes, such as office spaces, staff-only spaces and the individual music rooms set aside for visiting contractor music teachers. While rooms were relatively exchangeable, there were a few specific rooms which were reserved for specialist activities such as art, music, sport or science (see "Where" for more details).

Given the high number of staff, there were not quite sufficient classrooms for every normal post level 1 (i.e. not management) teacher. Two class teachers (out of a total of 58) were roving staff, moving around the school for different lessons. One deputy and the principal also did not have a dedicated room. These staff would use the staffroom spaces and shared staff computer laboratory to store their work and personal effects.

Of the post level 1 teaching staff, the highest lesson load, excluding meetings and substitution duties, was 83% of total potential periods. The lowest was the librarian at 39%, followed by sports coordinator at 50% and the school counsellor at 52%. The mean average lesson load for normal teaching staff was 70%, with the median at 72% and the interquartile range running from 65% to 75%.

5.2.1.3 Modularity

School A had a modular timetable, especially at the FET level (Grades 10, 11 and 12), where the timetable was totally modular. For the 'fixed' curriculum at the Senior Phase (Grades 8 and 9—see "What"), languages, mathematics, and arts and culture were timetabled in runs (see Appendix B showing School A's timetable modularity). This modularity meant that timetabling was a less messy affair, since the knock-on effects of clashes were contained within subject clusters.

It also ensured that teachers who taught the same subject(s) were free in the same periods for the vast majority of subject areas, allowing for administrative and planning meetings to be included in the main timetable. In terms of subject spread, of the 58 teachers at School A, 35 taught only one subject (e.g. mathematics), a further 20 taught across two subject areas (e.g. English and drama) and only three taught across three subject areas. Teachers being limited to the fewest possible subjects minimized both their

planning and meeting overhead for their subjects, as well as enmeshment across subjects in the timetable. Modularity also meant that students could be moved easily across sets, and class sizes could be varied within a run without knock-on effects on other areas of the timetable. Some unit subjects could also then be subdivided, unbundling generic subject areas into more specialised components (see “What”).

Perhaps most significant, however, were the effects such modularity had on assessment at the school. Subject-grade runs, by design, allowed for simultaneous assessment to ensure class tests could not be shared amongst students. Where this was not possible, all classes within a grade had that subject allocated between breaktimes, to contain assessment leaks (e.g. all Grade 9 classes had English before first break on a Monday morning, or a single Grade 8 English run was built into a Thursday’s schedule, meaning that these days were ideal for in-class assessment).

The timetabler at School A also explained that, in order to prevent overloading students with multiple high-stakes assessments on the same day (and hence to optimise test performance), the timetable explicitly included such ‘test days’. If a particular subject department booked a test day on the assessment plan for the term, no other subject could schedule an assessment on the same day. Test days also synchronised students writing the same assessment for the same subject but in different FET elective streams e.g. Grade 10s who did life science in different elective streams all wrote life science tests on a Wednesday between first and second break.

5.2.1.4 Timetabling horizons

The task of timetabling at School A began far in advance. Planning for class allocations and subject choices for FET began by September of the previous year. According to the principal and the timetabler at School A, the small group of staff (approximately three) who were responsible for setting the next year’s timetable would be relieved of exam invigilation duty in November–December of the previous calendar year in order to complete the timetable and leave sufficient time for consultation.

By this point, student subject selections, staffing contingents and student admissions had all been finalised, ensuring that the timetable generated would not be unsettled by changes in these critical inputs. While last minute changes did occur, these were described as “occasional”, and stability was the norm from year to year (see also “Whom” below). Class allocations would be delegated to subject departments for negotiation prior to these

lists being compiled, ensuring sufficient staff buy-in to the distribution of classes before timetable compilation began (thereby mitigating staff dissatisfaction with the final output).

The first final timetable (approximately the 13th or 14th version by the timetabler's estimate) would be made available to staff for comment before the school summer holidays began, although requests for changes at this stage were described as "cosmetic" e.g. room changes, or avoiding the same class doing the same subject at the end of the day on multiple days in the week. In general, the timetabler could usually accommodate most normal expectations such as rooming stability (since most staff had their own room), and a spread of different times across the week for each class/subject combination (which was easily rectified by a simple 'row switch' due to the high level of modularity present in the timetable design). The following year's timetable would be signed off before staff left for their annual vacation.

Despite all this stability, the timetabler at School A, when asked his advice for his successor, emphasized the need to remain "eclectic" and open to novel solutions to the timetabling process. Both the timetabler and the principal emphasized that the timetable as product and process needed to accommodate staff preferences and desires:

You've got to be open enough to learn and grow with the programme and always consider everybody in the process because there are just so many people you are working with—they aren't just numbers and names—**so you've got to be flexible like that as well**. You've got to allow for a happier person at the end of the day that's gonna receive that timetable. You know, for some people, it's "You've changed my year". And to see, to see it have that effect makes you realise you're working with people. And some people's psyche just works like that: if they see a timetable that doesn't suit the way they figured it would happen for them—or any given day would happen for them—um, it makes their year. And so, you go into the year with a very negative kind of focus, so one of the worst things we've done has also been one of the best things, and that's been putting our timetable up. And saying (to staff) 'scrutinise it, ridicule it'...

School A Timetabler

The long horizons of timetable planning at School A enabled this kind of delegation and consultation in the process, thereby constructing staff buy-in to the artefact and, with it, commitment to its legitimacy to hold rhythm once lessons began. In the words of the timetabler at School A:

I can say this with absolute certainty that this is the first school I've been to where the timetable is actually **the** timetable.

School A Timetabler

What School A's timetabler meant was that School A's timetable regulates activity tightly in practice (this is explored further in Chapter Seven). Behind this tightness is a stability and long planning horizon that enables the school leadership to build legitimacy into the timetable as a consensus artefact, and mitigate against the potential conflicts that might arise from unhappiness amongst staff (similar to that described by Christie (1998)).

5.2.1.5 Satellite timetables and their relation to the main timetable

School A's timetable had multiple secondary, or *satellite* timetables, named such as they rotate around—or orbit—the main school timetable. Some of these satellite timetables were included in the main timetable planning, and others only settled as the term began and scheduling arrangements could be made with students.

Weekly satellite timetables

The weekly satellite timetables included: subject department meetings (which were often also split into phase-specific meetings for large subjects such as mathematics and languages); management meetings; whole staff meetings; sports meetings; the school's additional music schedule (private lessons with contracting consultant teachers that were integrated into school hours and rooms); break duties; and substitution for absent colleagues.

Such was the elasticity and modularity of the School A core timetable that many of these foreseeable weekly administrative arrangements could be integrated *into* the core timetable by the timetabling team. Many subject department meetings were included in teachers' weekly schedules, an arrangement made possible by the modularity of the core timetable. Where teachers were more divided across multiple subject areas, these meetings were scheduled before school or during break times. However, again this was viable, due to the significant amount of guaranteed free time teachers had built into their weekly schedule (see Appendix C for a detailed breakdown).

Perhaps the most noticeable weekly satellite timetable that was integrated into the main core timetable was teacher substitution. Staff absence is an inevitable part of any school. What made the rhythm at School A particularly even-keeled was that other staff got no surprises of lost frees when their colleagues were absent: substitution duty was predictable and forewarned. This also assisted in avoiding conflict between staff who resented losing an anticipated free period.

Satellite timetables at different scales

In addition to these weekly rhythms, there were other schedules that integrated with the school timetable at a different scale: SGB meetings and parent-teacher meetings interlocked at the scale of the term, and annual events such as drama productions, sports days and extra-mural trips at the scale of the year (or even biennially). Non-teaching staff would create their own satellite timetables that synchronised with the core timetable e.g. the printing room staff kept track of test days, and the laboratory technician had her own booking schedule for lab preparation for physical and life sciences for each grade.

Most of these satellite timetables were as stable as the core timetable, being planned and settled simultaneous to, or independently of, that main timetable. One particular satellite timetable stood out as unusually unstable: the music timetable.

The music timetable

The music department were exposed to flux in a manner that the rest of the school was not: students would change their minds about which instruments they wished to study; contract music teachers would terminate their services at short notice; or students could only come to music lessons when they could 'afford' to miss part of another normal school lesson.

The result was a fraught timetabling process for the head of the music department, who would have to reissue timetables to her staff as arrangements changed and shifted (a process she clearly found very stressful and time consuming). While the permanent music staff who were employed by the school had their own rooms/offices for one-on-one lessons, they would often need to yield these to contract staff who were part-time and only available at certain times during the week, making venue booking extremely challenging.

The music department would also often schedule lessons during break times, or before or after school, since some students could not make any other time. This resulted in a sonic clash between students playing and talking in the common spaces during breaktime, and the music lesson where the instructor needed to listen carefully to the student. Such arrhythmia in the qualities of the spaces and the out-of-sync times between the music department and the rest of the school was a source of frustration for the music department, and recognised as a legitimate problem by the senior management of the school (see "Where" for details about the remedy for this issue).

The next section lifts the lid on these qualities of the timetable at School A to understand what forms of capital have made these arrangements possible. More detail of the timetable is described in relation to the five strands of inputs identified in Chapter Four.

5.2.2 Forms of capital shaping School A's timetable

5.2.2.1 Who: teaching and non-teaching staff

Underpinning the modularity and elasticity exhibited in School A's timetable was a veritable army of deeply experienced teachers, along with support staff who ensured those teachers' focus could remain on teaching and learning.

Teaching staff

School A invests heavily in subsidising state provision of staff with privately funded posts. Of the 58 teaching staff, only 26 are funded by the provincial education department, with the remainder paid for from student fees, bar three exceptions: such is the social capital and strength of field position of School A that three foreign language teachers were sponsored by the relevant consulates of those countries, namely Italy and China. These three teachers were part-time staff exempt from normal extra-curricular duties such as substitution and pastoral work, and did not draw salaries from the school.

Two teaching interns were also included in the school teaching staff, and although they were not allocated lessons in the timetable, they often were used for substitution.

The teaching staff at School A offer a wealth of experience between them, with many bringing qualifications from prestigious institutions.

In its 65-year history, the school has only had four principals. A detailed analysis of the annual staff photos exhibited on the walls of the main entrance corridor suggested that School A enjoyed a strong core of deeply experienced senior teaching staff, with relatively high turnover of junior staff on the periphery. Far from being just 'human resources', the experienced core of teachers constitutes a wealth of embodied practical knowledge, and an ingrained school-appropriate habitus.

Intuitively, one might assume that fortified schools preserve their fortification through low staff turnover; that abundant resources, 'well behaved' students from wealthier backgrounds, parental contributions to the school and an element of prestige etc. would assist in retaining staff for longer periods of service. This in turn would reduce the administrative burden on the school's management team for advertising and interviewing

new staff, as well as the overhead both administratively and emotionally of constantly reintegrating new people into the school community.

However, an analysis of staff turnover at School A suggests a different pattern. In order to establish staffing 'rhythms' of repetition (staying) and difference (exits and entrances), 31 years of annual staff photographs were collated into a timeline of employment. What emerged was a bimodal distribution of staff in terms of longevity at the school. That is, a core of senior staff who each had experience in excess of ten years at the school formed the base of the staffing body, but a significant number of staff were newcomers, and there was an annual turnover of staff of between 20-30% each year. There was, in particular, a very high turnover from 1995-2007. It is possible that this was due to the particular leadership style of the then principal, who served from 1995 to 2004, although it could also be attributed to broader turbulence in SA society post the first democratic elections when School A would've—like most ex-White schools—undergone significant changes in admissions and curriculum.

The trend of high staff turnover has settled down in the last five years, and the current staffing contingent is the most stable on record based on the photographic evidence. The box and whisker plot below indicate the difference in spread of years of service amongst past and present staff, indicating a deep base of long-term experience in the current teaching corps.

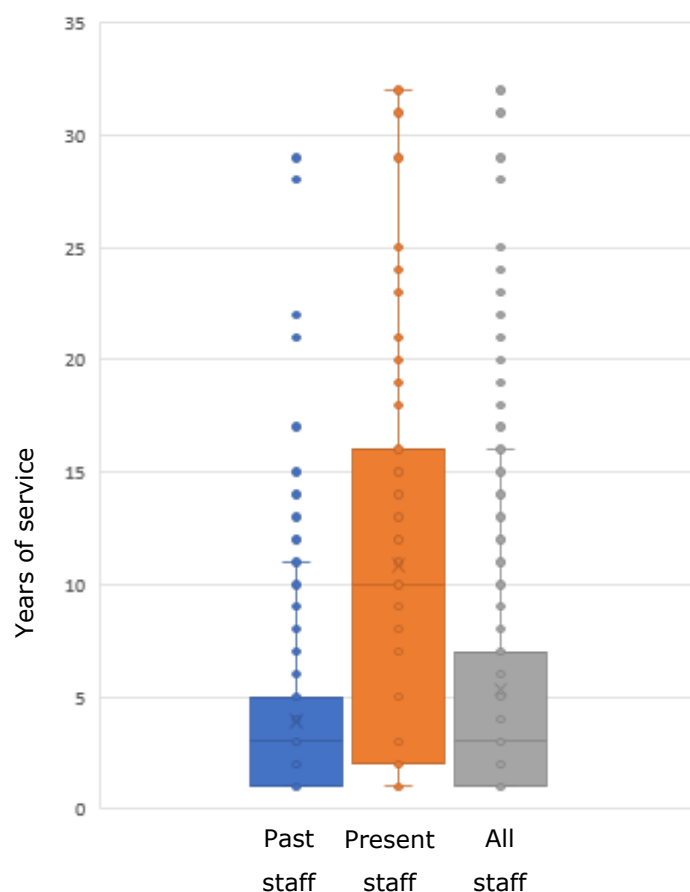


Figure 5.1 Years of service at School A: contrasting past and present staff

Reasons as to this stability are hard to determine. What is relatively certain is that this blend of 'old timers' and 'fresh blood' means that School A has the embodied cultural and social capital to embrace repetition and difference in its organisational practice, an ethos that comes through more clearly in Chapter Seven when timespace-lived and timespace-perceived are examined.

Non-teaching staff

In addition to this large and experienced teaching corps, School A enlisted the support of many additional non-teaching staff to bear the administrative burden of the school. These included:

- A team of maintenance and cleaning staff, with two team managers (one for grounds and one for buildings) and a team of nineteen cleaners and workmen (only two of whom are funded by the provincial education department);
- A full-time kitchen manager/caterer for the staffroom;
- Two receptionists;
- Three finance personnel;

- An academic administrator;
- A clinical counsellor (in addition to the head of the LO department, who also worked as a school counsellor);
- A reprographics coordinator;
- A personal assistant for the principal;
- A full-time science lab technician;
- Two computer technicians (in addition to the technology teacher who also assisted with lab administration);
- A tuckshop coordinator;

... and a (soft-funded) administrator for the school alumni network who remained involved with the school (including sourcing bursaries for students—see “With what”).

When pressed to choose between additional teaching staff or administrative staff, the principal of School A was emphatic that this was a Hobson’s choice, and the functioning of the school required both to keep the focus on teaching and learning.

5.2.2.2 What: curriculum

One of the most remarkable properties of School A’s timetable is its interpretation of the national curriculum.

In the FET phase, as students approach school-leaving exams, subject offerings are tightly in line with a set of electives that maximises entrance to academic higher education institutions. This is by design at the principal’s express behest. Subjects that are not prerequisites for their university counterparts are seen as unnecessary (e.g. offering Accounting or Business Studies, which are not required for access to commercial degree programmes). Every student is required to take a form of science, either life sciences (biology) or physical sciences (chemistry and physics) as one of their electives, since many prestigious institutions score a national senior certificate with science more highly. ‘Softer’ subjects that are not in keeping with university academic programmes are not offered (e.g. tourism, consumer studies—see Appendix O for a full list of FET elective subjects).

Teachers are given some autonomy to adjust the official curriculum content, if they think this is necessary for maximising learning outcomes. In the words of the principal,

I say openly to my staff: as far as I’m concerned there’s only one syllabus that’s important, and that’s the matric (Grade 12) syllabus. So, you’re eventually gonna get there. Educate the kids leading up to that. You teach them what they have to learn.

School A Principal

School A recognises the real stakes of what constitutes successful symbolic capital in the field of schooling in South Africa, namely high senior certificate results in prestigious subjects, and optimises its efforts towards this outcome.

This recognition backwashes into the design of the Senior Phase timetable, where several deviations from the official curriculum are made. As is explained in more detail in Chapter Six, this phase of the school curriculum is standardized across all public schools. But School A made changes to prepare students for the FET phase:

1. The official subject 'natural science', normally presented as a single subject in the lower grades, is split into two—physical science and life science—to mirror the division that comes in the FET phase. Time is split evenly between these two unbundled subjects, with the generous staffing provision allowing specialist teachers for each. Students in Grades 8 and 9 must take both.
2. The official subject 'arts and culture' is split into three electives—music, drama and art—again, an unbundling that anticipates later FET subject specialisms. Students in Grades 8 and 9 are allowed to choose **one** of these three, and the specialisms are timetabled in parallel across multiple class groups to allow for classes to be divided and reconstituted based on student preferences.
3. A third language is offered—isiXhosa, French, Chinese or Italian—in addition to the mandatory second language (Afrikaans or isiXhosa). To make space for this extra subject, the school compresses economic and management sciences (EMS) for the whole senior phase into Grade 9 and correspondingly compresses technology (Tech) into Grade 8, creating space against these two low-status subjects to timetable the third language offering.

This unbundling and specialism is enabled by the who available for classes at School A, as well as the adequate rooming (where) for dividing students up in synchronised parallel lesson blocks.

In addition to the unbundling, slight adjustments are also made by the school to allocate time where it is perceived to be most needed. In the junior grades, EMS and technology are not only compressed from two years of learning into one, but are also reduced by half an hour to make the school week 27 instead of 27.5 hours. The senior classes are divided into smaller groups for high-stakes subjects e.g. the Grade 12 maths slot is divided into eight classes instead of six to allow for offering advanced maths and maths literacy without impacting other groups through larger class sizes. Slight time allocation changes are made

in each grade depending on the school's sense of where extra time is required to maximise results.

The factors that allow School A to get creative with the curriculum in this manner are further discussed under "Field position" and in Chapter Six when the policy roots that shape curriculum are examined. What is obvious from dissecting the timetable is that School A is able to:

- offer an enticing curriculum with unusual choices, even for junior students (such as music and French);
- deprioritize subjects it sees as not necessary for university (EMS, LO and Tech); as well as
- unbundle the arts and sciences towards the ends of maximising senior certificate outcomes.

This combination of niche offerings and highly transferable school leaving subjects will attract a different type of capital into the school which is not measurable in money or assets: its students.

5.2.2.3 Whom: student recruitment and 'fit' for the school

School A has a reputation for excellence and takes the substance of this reputation—its results—seriously. In the open marketized schooling system of South Africa, any student can apply for a place at the school, and applications far exceed places available.

The total number of students a public school is expected to enrol is calculated based on its publicly funded teaching posts, and School A takes approximately 180 students into Grade 8 each year from over 1300 applicants (i.e. a less than 14% acceptance rate).

Applications open in March of the preceding year, and the Head of Grade 8 and principal are both extremely involved in the selection process (in the principal's words, "That's my second term. I interview about 450 candidates."). Applicants must complete an application form in their own words indicating their interests, passions and motivations for attending School A. Public schools in South Africa are not allowed to discriminate based on prior attainment, language, race, gender or religion, making the task of selecting only 180 students from such a large applicant pool more art than science. When asked how students are selected, the principal described the process in the following words:

Principal: No there's a ... there's an amazing work ethos (in the students) that's just there. You don't have to emphasise, it's just *there*.

Interviewer: Do you look for that when you interview the Grade 8s?

Principal: Well you can't really, they're so young. If you look for a spark, for enthusiasm, you look for a bit of the X factor, something different.

The "something different" that the principal refers to in the above quote may well be the correct habitus of a student. As described in Chapter Two, this is a rather ethereal concept, borne in the body and mannerisms unconsciously, but shaping the disposition to particular preferences and actions and seeming quite natural when deployed in the field to which it is accustomed. Many of the students who attend School A are from middle class backgrounds. Even more specifically, School A has a reputation as a politically 'progressive' school that serves the academic families of the neighbouring university, and offers a slightly different type of symbolic capital than a more traditional conservative school in that it can boast significant connections to the democratic South Africa's political resistance movement.

The upshot of all this is that School A attracts a very particular type of applicant, and an excess of them. With competition for places so strong, the likelihood of finding what Ball (2003) calls 'easy to teach' students is high, and the locus of power is with the school, not the students.

This relationship between supply and demand means that the student body of School A is chosen early and remains stable. The population pyramid of the school is almost cylindrical in its consistency from Grades 8 to 12. Repeaters are almost unheard of, and the oldest student in the school is of an appropriate age cohort (17 or 18 years of age). The absence of attrition between grades means that class sizes remain predictable and manageable from one year's timetable to the next. Students who are not coping are counselled out and assisted in finding 'more appropriate' schooling environments, but this is a rare exception. To quote one teacher at the school, (when discussing junior teachers who are struggling):

Fortunately, the School A kid is able to absorb that. 'Cos they work well generally. You can throw a cat at them to teach them and they'll pass.

School A Teacher

The embodied cultural capital of School A, then, in both student stability and suitability, produces a regularity for timetabling that supports consistency and rhythm.

Grade 8 dressage

In addition to being 'primed' so to speak for the high-stakes academic environment of School A by being socialised into the correct habitus for school, new students in Grade 8 are inducted into the doxa of the school through a lengthy programme at the beginning of the calendar year when they arrive: in the words of the Grade 8 head who coordinates this programme, "by the end they'll be School A-ers!". This programme of dressage folds new students into the rhythm of the school, familiarising them with the space and routines, enrolling them in the cultural practices of the school and setting out the relations of power as to who sets the rhythm (the school) and who keeps to this beat (the students) (this relationship is explored more in Chapter Seven).

From a timetabling perspective, this means that student compliance with school timespace expectations is a stable form of embodied cultural capital that can be relied upon when designing the timetable of the school. An almost frictionless eurhythmia is assumed (See Chapter Seven).

The effects of students on other strands

In Chapter Four, three aspects of the whom were identified that interacted with other strands in the timetable: the languages of students, the numbers of students, and the prior attainment of students.

From a language perspective, School A's offering is so diverse it can accommodate students of local or foreign origin without concern (offering both three local languages as well as three foreign languages including French for immigrants from Francophone African countries).

School A's fortified field position means it receives significant support from its local district office regarding appeals and contestations on its admissions decisions. The principal stated categorically that he can work cooperatively with the provincial department in this regard, and can rely on their support in 95% of the cases brought on appeal. For the remaining few he can "make a plan", but these are insufficient to inundate the school with applicants they would prefer not to have taken. Effectively School A is not 'fighting on both fronts' (i.e. parents AND the department) and their consistent production of excellent results means that the provincial and district authorities are reluctant to mess with a formula that works.

School A avoids zoning²⁶ its applications. Its fortified position will command far more demand than it can supply, and zoning throttles the variety and depth of applicants. Also, selectivity along geographical lines might leave School A vulnerable to challenges regarding preferential treatment in favour of the middle-class families that live in its surrounding leafy suburbs. By refusing zoning and taking students from a broad geographical distribution, School A in fact shores up its justification in the students it does select, further protecting itself from question or appeal.

However, such a broad geographical church of students does not prevent students arriving at school on time. The next section explores the geographical space, as well as the infrastructural space, of School A and the effects of physical space on the timetable.

5.2.2.4 Where

The where component of timetabling inputs has two dimensions: the immediate infrastructural qualities and quantities of the school site, and the geographical location of the school, particularly in reference to apartheid geographical stratification and segregation. The latter is addressed first as its effect on timetable design is less obvious than the former.

Geographic location

School A is located in a middle-class suburb formerly designated for Whites only. Its proximity to a prestigious university creates a localized gentrification effect, with university accommodation demand driving housing costs up. This means that students who live near the school come from well-off families. School A is also located on a main arterial road and parallel train artery (the most reliable in the city), meaning students have access to public forms of transport via train and bus. Some of the closer students also travel to school via bicycle, a viable option through a (somewhat haphazard) system of cycle lanes in the suburban vicinity.

While most of the students attending School A are from the adjacent suburbs, others came from all over the broader city area—some over significant distances—and by multiple forms of transport. The majority, however, arrive at school by private vehicle.

Of direct significance for the timetable was the school's relatively central location, coupled with the power asymmetry between the school and its community over demand and

²⁶ Zoning refers to the practice of geographically constraining applications to specific predefined catchment areas.

supply: the school's policy regarding late-coming was clearly stated on its website, and the school had sufficient authority to enforce this policy, meaning that classes started when the school decided, and scheduling needed to take no heed of students' challenges in getting to or from school²⁷.

Teaching spaces

As previously mentioned under "Elasticity", School A had a significant array of rooms to use in its timetable, with an excess of venues at any one time.

The 180 students in each grade were divided up into a minimum of six classes of 30 children, meaning that at any one time, the minimum number of rooms required to house all the classes simultaneously was 30 (six classes per grade across five grades).

Across the campus, School A had the following teaching spaces:

- 36 'normal' classrooms which could house a full class, and two smaller rooms (used for teaching isiXhosa) which could house a smaller group;
- Two specialist art rooms, one of which had a separate 'theory' section and a mezzanine loft for easel work (i.e. was double-story);
- Three specialist science laboratories with sinks and water;
- A technology work-shop;
- A computer room and separate library (which also had seating for desk work);
- Two seminar rooms with audio-visual equipment;
- Three halls, one of which had a stage, and another other which was an indoor sports hall (both the main hall and the sports hall were sufficiently large to accommodate the whole school for assemblies);
- Two seminar rooms;
- A music classroom;
- Ten smaller music tuition rooms for one-on-one lessons.

Bar the music tuition rooms, the other specialist spaces (labs, halls, computer and tech rooms, art rooms) could—and were—all used for normal scheduled lessons, leaving ample rooming elasticity for splitting up groups.

²⁷ Some satellite timetables described the school's willingness to assist students who use public transport after late evening events, as buses, trains and minibus taxis are not considered safe at that time. But the predominantly middle class scholar base of the school meant students for the most part had access to private transport, and challenges navigating the transport ebbs and flows of the city fell to students individually, without impinging on the routines of the school.

Class sizes

School A maximised this elasticity. Although technically the school had 30 class groups, at no point were only 30 classes going on. The minimum number of parallel classes throughout the timetable was 31. At its most divided, there were no less than 38 classes occurring simultaneously across the school. These figures do not include one-on-one lessons in music.

The staffing and rooming elasticity meant that class size in real terms across School A was far smaller for teaching and learning than the pastoral groupings of 30 per class in each grade. The average number of simultaneous lessons across the whole school was 34,8, meaning that the actual average class size was 26 students.

Room qualities

Using rooms effectively across the school meant sufficient provision of room qualities and characteristics, as well as quantities. Almost every normal classroom was sufficiently equipped with projectors and computers, with many also equipped with track-and-write technology (modern equivalents of old overhead projectors which record and invert a teacher's writing at a lectern onto a projector screen²⁸), or smart boards. Wi-fi was available throughout the school, and adequate seating (in the form of old—albeit well-maintained—wooden desks and chairs) was available in each room. Bar the new technological additions, the infrastructural makeup of the average classroom was unchanged since the school's original design, with wooden floors, cork notice boards and simple furniture and blackboards.

Specialist subjects requiring specific material provisions included music, art, drama, technology and science. Music, art, drama and technology rarely needed to accommodate more than two classes simultaneously at any given time, and the rooming provision for these specialisms was sufficient. The only constrained specialist space was that of science laboratories, given that every student in the school had to partake in at least one science subject and many took two. To accommodate this, certain specific lessons were booked and pre-coordinated as 'laboratory lessons' and room swaps arranged accordingly. The satellite timetable run by the dedicated lab technician kept oversight on this rooming

²⁸ This technology seemed most popular with the maths teachers for whom typesetting mathematics into printable form would be onerous compared to handwriting. Audiovisual playback of video and other materials seemed most popular with the history department).

fluidity to ensure that no clashes arose when labs were needed by multiple groups simultaneously.

Non-teaching spaces

The use of space in schools for teaching and learning requires more than just appropriate teaching rooms. School A also utilized multiple non-teaching spaces which ensured that off-duty teaching staff could continue to be productive in their preparation and planning, and that the various speciality materials required to support the broad offering at the school could be stored appropriately.

These (built) spaces included:

- two finance offices;
- a room for the prefects;
- a principal's suite adjacent to the school reception with a strong room and space for a personal assistant;
- a large reprographics room which included three high speed printers and photocopiers and ample storage space for paper supplies and produced materials;
- a costume and wardrobe room for the theatrical productions of the school;
- a room for maintenance and cleaning staff to relax in;
- under-stairs storage for archived records;
- under-stairs storage for cleaning materials;
- a workshop²⁹ and office suite for the building manager and his team;
- outside storage for building materials and scaffolds;
- a sick room;
- a lost and found room;
- a kitchen for the tuckshop;
- ample storage for chairs and orchestral equipment beneath the stage of the main hall (and also in an adjacent cordoned off room);
- 4 science equipment, specimen and chemical storage and preparation rooms;
- a separate kitchenette for grade 12s to run a small kiosk at break time;
- a book and uniform storeroom-cum-shop;
- an office in the library;
- a room for the school psychologist;

²⁹ This workshop included power tools, lathes and other equipment which was used to maintain the school's wooden classroom furniture.

- an office for the school counsellor;
- a dark room;
- a time-out room;
- a gallery above the main hall, with attached storage room for lighting and sound equipment;
- a staff work room;
- a staff relaxing room with a kitchenette and balcony (including a TV with satellite link up);
- a computer store room and a computer workshop;
- 13 offices for individuals or for use as departmental rooms;
- Walk-in storage facilities within each art classroom for storing equipment
- the tuck-shop;
- and a sports storage chamber beneath the spectator seating in the sports hall.

Students also had storage facilities for books and sports equipment. Lining the corridors of School A were 687 colour-coded metal lockers, of which 158 were unused at the time of data collection.

While these non-teaching spaces were not directly reflected in the timetable, they provided a silent support around teaching spaces—classrooms were available for use for teaching and learning, and materials were appropriately available without competing for teaching and learning space³⁰. This is discussed in further detail in Chapter Seven.

The new music block: an illustrative case

The case of the music timetable, and its arrhythmia with the rest of the school, was described earlier under “Satellite timetables”. Unlike other departments at School A, the music staff needed to double up office space as teaching and learning space, and needed much more fluid rooming than was currently available to accommodate a looser schedule and multiple external staff with competing rhythms. In addition to this, the soundscape of the music lessons clashed with that of the rest of the school.

To resolve these issues, the school had set aside significant capital savings to develop a new music facility which could accommodate these needs (the architectural planning had almost reached completion at the time of the study, and ground clearing commenced soon after data collection was completed). The history of this decision to build new

³⁰ We will see in the case of School B that storage and administration competed with teaching and learning for space.

infrastructure for the music department illustrates the relationship between rhythm and timespace: a previous attempt at building a music block resulted in a wing of rooms now used as normal classrooms. It was clear that this wing lacked the qualities appropriate for the music department, with all the rooms being large and open, a lack of small tuition rooms, almost no storage for equipment and inappropriate acoustic qualities.

That the school would (and could!) go to such great costs to buffer the music department's rhythms from those of the rest of the school indicates a tacit understanding on the part of the school planners and decision makers about the relationship between forms of capital, timespace, rhythm, and teaching and learning.

Underpinning this capacity to respond to misalignments between spatio-material constraints, school rhythms and teaching and learning is the requisite economic capital. All the other strands of the timetable and forms of capital thus far described rely on the school's ability to consistently accumulate and reproduce its base of economic capital. The next section discusses this final strand.

5.2.2.5 With what: fees and funds

School A is designated as 'Quintile 5', the wealthiest category, which is also permitted to charge fees to supplement state allocated funds. In the year of this study, Quintile 5 schools received R228 per student from the public purse (by comparison, in the same year, a school that is not allowed to charge fees would be awarded R1 316 per student) (Department of Basic Education, 2018). As a school of 910 students, this amounted to a total of R207 480 of *public* funding for school materials and buildings. This amount is separate from the salaries of publicly funded teachers.

Supplementing state funds: fees

Schools supplement state funding in South Africa through charging user fees (if they are allowed—see Chapter Six) and fund raising. School A raised the lion's share of its supplementary economic capital through fees. While School A is not the most expensive public school in the city from a fees perspective, its annual fee is not insignificant at R37 420 per child per year³¹ (for the year during which this study was conducted). School

³¹ For comparison purposes, the current minimum wage in South Africa set by NEDLAC negotiations approximately 12 months after this data was collected as R42 000 **per annum**. This minimum wage was expected to increase the income of approximately 50% of employed South Africans (Wits, 2015).

A manages to collect 90% of its fees each year by the end of the calendar year, or approximately R30 310 300 for its enrolment of 910 students.

An estimated 1% of students are totally exempt from paying fees (see Chapter Six on how this is calculated according to national policy), and a further small number are partially exempt. 4% of school fees are sponsored for students through the old alumni networks and other donors and bursaries.

Fees at School A do not cover private music lessons, camps and excursions or sporting and cultural tours.

Supplementing state funds: fund raising

Beyond fees, fundraising in schools often takes two forms: infrastructure subletting, or events. The principal at School A was emphatic that fund raising events often took more effort and time than was worthwhile for the yield. While specific events were held to raise funds towards particular ends, these were not seen as supplementary to the basic operations of the school (e.g. a sports event based on sponsorship would raise funds for worthy sports team members unable to finance their own sports tours; or the Grade 11s would put on a talent show to raise funds towards their own matric dance the following year).

The bursar at the school estimated that approximately 1% of the school's total budget was raised by infrastructure subletting, but that the other 99% was from fees and the relatively meagre public allocation per child.

Counting the pennies

While the state-allocated amount was dwarfed by the school fees, the school did go to the (somewhat laborious) lengths of claiming back from the state what they could for each exempt child (who would be allocated the fee-free amount of R1316, albeit 18 months retrospectively—see Chapter Six).

In addition to this, the school deployed its significant personnel capacity towards applying for infrastructural grants from the state. For example, the school received R3 000 000 towards capital development projects (new infrastructure) between 2013 and 2015.

Like most fee-charging schools in South Africa, School A utilized the services of fee-collecting agents for overdue or unpaid fees.

Liquidity

School A's fortified position is produced by, and reproducing of, its ability to continue to access economic capital. Such fortification also enables a resilience against minor ebbs and flows in the financial rhythms of the school. Although it was apparent that fee collection occurred throughout the year and not in upfront lump payments, there was no indication of liquidity issues or concern regarding delays in compensation from the provincial department for exempt students.

Liquidity of a school's private income often bites hardest on supplementary staff who are paid by the school directly (what are known as 'SGB staff'). School A's ability to gather economic capital reliably meant that all staff could remain engaged in teaching and learning without financial precarity, as salaries are not compromised by the school's liquidity situation³².

Maintenance and development

The bursar of the school estimated that approximately 4% of the school budget went towards maintenance and 6% towards capital development (new infrastructure) costs. School A's infrastructure was mostly old and dated from the 1950s, but well maintained: the school principal cited the 'broken windows' principle as his philosophy towards maintenance and repairs, and noted that it is "easier to maintain (what works) than to introduce (change)"—see Chapter Seven for more details.

One of School A's hidden forms of economic capital is their inherited infrastructure which, as a school built for White students during the apartheid era, was of significantly better size and quality than those bequeathed to schools that served students of colour. As the deputy in charge of maintenance noted, the old buildings of the school are almost "over engineered", and maintenance of the newer buildings was more of an issue due to inferior building standards and lower quality materials. He also took a strong stance on "doing things properly" and not on the cheap—a position both afforded by sufficient access to economic capital, but also one that bolsters future economic capital, by avoiding unnecessary future repairs of poor-quality work³³. In this respect, School A's fortification is in keeping with their timespace horizons of planning about their material spaces, both inherited from the past, and projected into the future.

³² This will be encountered again with School B.

³³ In South Africa, a popular Afrikaans saying is 'goedkoop is duur koop' meaning 'to buy cheaply is expensive'.

The relevance of such dispositions towards maintenance manifested in the timetable primarily as the reliability and availability of infrastructure for use. Material spaces were reliably available for teaching and learning without significant interruptions due to maintenance issues.

The lion's share: extra staff

By far the largest investment School A made with its extra economic capital is in increasing its staff allocation as described under the strand who. The timetable elasticities described earlier are a direct reflection of the school's capacity to command fee fealty from the majority its students' families, bolstered by the scarcity of places in comparison to demand.

With what shapes the other strands

The stable base of economic capital extends the school's planning horizons forward, brings stability to staffing and rooming, and reproduces itself through attracting and retaining deep reservoirs of social and cultural capital embodied in both staff and students. It avails the elasticities required to build a timetable that supports sustainable rhythms of teaching and learning.

5.2.3 School A's field position and evidence of this in the timetable

The forms of capital described here are both produced by, and productive of, School A's fortified position in the field of schooling. Fees are not only asked for, but collected. Places at the school continue to be highly in demand. Year on year, the school continues to produce impressive summative assessment results (see Chapter Seven and Appendix D for more details of these). School A sustains a 'brand' as a high performing school, and is afforded certain liberties from authorities in curriculum interpretation towards sustaining this performance. The qualities of the *timetable* described here describe how fortification manifests in the necessary access to forms of capital for designing ample timespace for teaching and learning, so that the school can make allowance for student interests, material requirements for specialised lessons and sustainable staff workloads.

Advantage begets advantage, as minor variations and knocks are absorbed into teaching and learning rhythm via the modularity and elasticity available in the timetable. School A recognises that sustaining teaching and learning rhythms, and the systems that underpin it, are vital to its ability to produce good school leaving results. How these rhythms manifest in the everyday life of the school are detailed in Chapter Seven. The next section turns to School B and unpacks its timetable and forms of capital in a similar manner.

5.3 School B

5.3.1 School B's timetable

School B assembled its timetable using a software package titled *Time-Design*. As with School A, lists of key inputs (teachers, classes, runs, rooms, lesson lengths and other constraints) are assembled and fed into an algorithm that generates a timetable, adhering as closely as possible to the stated criteria. Beyond curriculum contact time, School B's timetable only scheduled assemblies (one per week on a Wednesday), with subject and staff meetings held before school, and substitution duties scheduled in a just-in-time manner.

5.3.1.1 Granularity

The granularity of School B's timetable had two notable properties: it was coarse, and it was uneven. The length of the cycle—a fortnightly timetable (ten-day cycle)—synchronised with the weekly calendar in alternating weeks. But within and between days, there was significant variation in rhythm. The table below shows the lengths of lessons across the fortnightly cycle.

Day in the timetable		Period 1	Period 2	Period 3A	Period 3B	Break	Period 4	Period 5	Period 6
Week 1	Mon	60	60	60	n/a	40	55	60	60 (45)
	Tues	60	60	60	n/a	40	55	60	60 (45)
	Wed	70	70	40 (a) ³⁴	n/a	40	65	50	60 (45)
	Thurs	60	60	60	n/a	40	55	60	60 (45)
	Fri	60	60	n/a	n/a	30	60	60 (45)	n/a
Week 2	Mon	60	60	60	n/a	40	55	60	60 (45)
	Tues	60	60	60	n/a	40	55	60	60 (45)
	Wed	50	50	50	40 (a)	40	55	55	55 (40)
	Thurs	60	60	60	n/a	40	55	60	60 (45)
	Fri	60	60	n/a	n/a	30	60	60 (45)	n/a

Table 5.1 Lengths of lessons (in minutes) of School B's timetable.

Mondays, Tuesdays and Thursdays were identical, with all lessons at a full hour bar one lesson after break at 55 minutes³⁴. Mondays, Tuesdays and Thursdays all offered five hours and 55 minutes of total contact time.

Fridays only offered four hours of contact time, with school closing at 1pm. This was due to geographical constraints on scholar transport (detailed more under “Where”) as well as a critical mass of the school community—both students and teachers—adhering to Islam and hence needing to attend Friday mosque (this is explored more under “Whom”).

Wednesdays offered five hours and 15 minutes of contact time, but this was divided up differently between Week 1 and Week 2. A school assembly was desired every Wednesday, but the coarseness of the lesson unit meant that keeping the larger lesson length would’ve made adherence to official curriculum requirements very difficult (a subject would’ve lost a half an hour a week). As it was, School B only offered 27 hours each week despite 27.5 being mandated, in order to facilitate an earlier home-time on a Friday.

The coarseness of the unit lesson (an hour) in School B was to minimise time lost to lesson transition (see Chapter Seven for more details). In the words of the principal:

I think from a point of view of getting the learners moving to class, the fewer changes we have, the better. I would like an even longer period, but they would die. They are not ready for it.

School B Principal

While back-to-back half hour units would’ve been identical in practice for the 60 minute lessons, this finer granularity was incompatible with the variable lesson length at School B. It would seem that the general rule in the timetable was an hour long lesson, with massaging on some days to make things fit. Such finessing is symptomatic of automated software that is unable to meet all the criteria as exactly stated—criteria are then eased or loosened to find an acceptable solution (see Appendix E).

5.3.1.2 Modularity

School B’s timetable was relatively enmeshed, and changes for one lesson’s arrangements would trigger a cascade of changes across seemingly unrelated subjects, teachers, rooms and groupings.

³⁴ While the final period on each day was marked as a full 60 minutes on the timetable, in reality a 15 minute register period was held at the end of each day, making the final lesson only 45 minutes. This is discussed in more detail in Chapter Seven.

For the FET grades (10, 11 and 12), subject electives enforced a modularity that meant these classes were timetabled in parallel, i.e. in runs (a necessary condition for providing electives). But the classes for English, mathematics and life orientation were entangled (see Appendix B—School B). This meant that class-groups would be organised based on whether students had selected to take pure mathematics or maths literacy, and then English language classes and life orientation classes would mirror the mathematics groupings. (That students often wished to move from maths to maths literacy created problems, as groups couldn't be evened out within an autonomous maths run—see "What" for more details).

At the Senior Phase (Grades 8 and 9), synchronisation across classes was primarily for students' second language options. Arts and Culture were in quasi-runs across half grade classes to allow for separate music and dance lessons. All the other subjects for these grades were enmeshed and unevenly spread throughout the week, with some classes sometimes having the same subject back to back for two hours (see Appendix B—School B). School B certainly did not have the space to timetable test days, making assessment very difficult in normal lesson time. This meant School B had to augment its main timetable with a satellite assessment timetable when students needed to write tests (see "Satellite timetables").

Synchronised language offering

Across the whole school, School B had to maintain modularity for students' second language choices. As is discussed in more detail under "Whom", the scholar population of the school was bimodal across Black isiXhosa speaking students and 'Coloured' students whose second³⁵ language was Afrikaans. Alternative language classes then had to be scheduled simultaneously to accommodate both student profiles. This modular offering of languages was resource intensive, as it required sufficient language teachers to cover a whole grade simultaneously. However, in School B's case, this offering was necessary, rather than a 'nice to have' (see "What" for more details).

At most, School B would divide the normal six classes into seven groupings within runs³⁶. That is: these independent runs did not divide up classes far from the original group sizes,

³⁵ 'second' is placed in inverted commas here since many students at School B were not native English speakers i.e. English would've been their 'second' (or third, or fourth) language; but English is considered as their 'home' language at school since English is the medium of instruction and assessment.

³⁶ Within a run, a school can divide a ringfenced group off into as many subgroups as they like, as long as the staff and rooming are available.

even if different distributions of students were made possible by the run. The limitations even within runs speak to the next quality of School B's timetable: staffing and rooming elasticities.

5.3.1.3 Elasticity

School B had some leeway in the elasticity available in its timetable. With 30 class-groups across the school, the minimum number of classes at any one time is 30. School B had 40 full-time teachers (excluding the principal, but including all deputies and heads of department) and free staff at any one time ranged from seven to ten. These free staff, however, still needed to cover any missing colleagues i.e. the count does not include substitution. This became a major issue at School B when the school found itself without three staff permanently (see "Satellite timetables", and Chapter Seven on timespace-lived).

Rooming at School B was closely coupled with staff. All staff bar the principal, one normal teacher and one senior teacher (the timetabler) had their own room allocated. There were 39 teaching rooms at School B. Some teaching rooms were dual purpose: the library, the two computer rooms and the lower media hall were all allocated as permanent teaching spaces (the latter caused some issues when this hall would be rented out to third parties during school hours—see "Where", "With what" and Chapter Seven).

At most, across the timetable, there were 32 lessons in session, meaning 7 venues could be available at any one time. Some of this elasticity was shut down, however, by staff being deeply reluctant to yield their room, or move to another colleague's room. This is discussed in more detail under "Where". Effectively this tight coupling between staff and rooms meant that spaces were not transferable when required, and that room count alone obscures an ossification in spatial use across School B's timetable.

Of the post level 1 teaching staff, the highest lesson load (excluding meetings and substitution duties) was 95% of total potential periods. The lowest was the school counsellor at 65%. Excluding this outlier, the next lowest was a 73% lesson load, with the mean lesson load for normal teaching staff at 82% of total lesson allocation³⁷, the median also at 82% and the interquartile range running from 78% to 85%.

³⁷ Given the irregularity of School B's lesson length, the same analysis (percent of total time as contact time) was conducted using minutes as the unit instead of lessons. The difference between the two approaches yielded a difference of less than a percent: hence percent of lessons is a reliable measure of contact time despite lesson length variation.

5.3.1.4 Timetabling horizons

School B began compiling the necessary lists for the following year's timetable in the September of the prior year. The timetabler, himself a former principal, would compile the lists of electives and the specialist teachers available to teach them and then ratify these with the leadership of the school. After any suggested changes were made, he would then consult with staff on the allocations of classes, subjects and grades and make minor adjustments where possible should staff express a preference.

Only once this buy-in had been achieved would the input parameters be entered into the *Time-Design* software to generate a school timetable. The timetabler was very clear that consultation at every step was a critical component of the process:

Once you've got your global picture of where you're going to, you take it down to (the principal), he looks at it, and then you go to the staff... it is only after that, that intense negotiation, and I would consider the staff to be the kingpins. If they are happy with what you've given them, you know confidently 'I can go ahead and pin this'.

School B Timetabler

At times *Time-Design* would produce a timetable that had less than ideal qualities e.g. clustering some classes in runs into groups of 50+ students, or clustering a member of staff's free periods all together, leaving them the gauntlet of the fortnight cycle without a break. When this occurred, the timetabler would produce three or four variants of the timetable and pin these up for staff to express a preference as to what types of trade-offs they would be willing to accept. Other strategies for addressing issues involved manually massaging the timetable after it had been produced by the software ^{38,39}.

Despite this care and concern for negotiation and convergence at various stages of the timetabling process, School B's timetable setting was subject to vicissitudes and shifts in the stability of its core input parameters. For the period of observation and data gathering, this predominantly arose in staffing provision—the realities of everyday rhythms and the role of the timetable in these is discussed further in Chapter Seven.

³⁸ See Appendix E for more discussion of this.

³⁹ School A's timetabler also made manual tweaks to the automated output.

5.3.1.5 Satellite timetables and their relation to the main timetable

School B had several satellite timetables, although these were not always visible on noticeboards. Some were predetermined before schooling began for the year, and others were settled once students arrived.

Weekly satellite timetables

School B had several weekly timetables that rotated around the core timetable, including: staff break duties (grounds patrol); staff morning meetings (which included subject/departments meetings on Wednesday mornings before school); detention duties for staff; latecomers' duties; gate duties; litter collection rotation; and after school extra-mural activities. School began at 08h30 (a relatively new feature of the timetable, as in previous years the school started at 8am) and staff meetings of various forms were scheduled from 07h45 (sometimes 07h30) until 08h25, with specific days set aside for senior management team meetings, sport-, grade-specific and subject-specific discussions.

Of all the weekly satellite timetables, those associated with student discipline were the most prominent, with break duties, gate surveillance, latecomer supervision and detention responsibilities often repeated on the staff whiteboard for the coming week to remind staff of these responsibilities.

Satellite timetables at different scales

School B had various other satellite timetables at differing scales, including the term, and year. These included SGB meetings, disciplinary hearings, once-off events such as sports days and school cultural events. Administrative schedules were mostly decided early in the year and circulated to relevant parties, whereas sports and discipline cycles were more reactive to students' interests or behaviours.

Substituting for absent colleagues

School B did not have a fixed substitution satellite timetable to inform staff if they were on standby in the event of an absent colleague (although the principal aspired to doing this). The reception staff and principal's personal assistant would assemble a daily substitution roster based on who was free once absence was known (i.e. staff had called in or emailed to say they would not be at school). This was then photocopied and placed on the door of the absent staff member's classroom, mostly to inform students where they should be going since their normal teacher was not available. Staff would communicate internally about substitutions and cover work via online messaging systems.

As will be described in further detail in Chapter Seven when timetable adherence is discussed, there was insufficient elasticity in School B's staffing contingent to reliably schedule standby for absence. At one point during the observation period, School B was permanently three teachers down, leaving only four to seven colleagues—including deputies and HoDs—available to cover for absent staff (as in School A, part-time specialist staff were not included for substitution duty). If deputies were unavailable due to their senior management responsibilities, then for the majority of the timetable only two or three members of staff were available, and often required. The table below shows the frequency across the school timetable of the number of staff available to cover absent colleagues:

Free staff available	Frequency of staffing availability (periods/fortnight)	After 3 teachers booked off	Without deputies
7	7	4	2
8	27	5	3
9	19	6	4
10	2	7	5

Table 5.2 Staff (in)elasticities available for constructing a substitution schedule.

In reality, School B trying to timetable substitution standby under such conditions would have ended up with every free period being a potential substitution period—School B could not guarantee any of its normal teachers' non-contact time as protected, and hence such a schedule would have been relatively meaningless. The effects of this inelasticity to stretch existing staff across knocks and variations to the school rhythm is discussed more in Chapter Seven.

Assessment timetable

The enmeshment of School B's timetable and the absence of runs across all subjects and all grades meant that running assessments was challenging. The school had to set up a separate assessment schedule that made significant changes to the core timetable for three weeks towards the end of the term. Such deviations included: suspending classes for a period so a test could be written across a grade; swapping periods in the day to schedule assessments back to back; sending non-writing groups to the hall for invigilation to prevent test swapping, and; suspending the timetable for the whole day to facilitate tests. This assessment timetable was out of kilter with the lesson timetable, making running the two in parallel a difficult undertaking.

5.3.2 Forms of capital shaping School B's timetable

5.3.2.1 Who: teaching and non-teaching staff

The lion's share of School B's fees and funds went to hiring extra staff to supplement state provided teachers and support personnel. School B has 28 state-funded teaching staff (including the principal), and adds 16 SGB posts to this (which includes four part-timers who come in on allotted days to teach dance and drama). As at School A, staff on school-funded posts have pay parity with publicly funded posts to ensure fairness.

Teaching staff

School B's 39 full-time teaching staff and principal exhibited a broad range of experience, from newly qualified teachers to those who had been at School B for more than twenty years, and had many years of experience prior to that (including the principal and the timetabler).

While the same photographic data was not available as that at School A, a survey amongst the teaching staff showed almost all staff had bachelor degrees and qualifications from reputable universities. Two teachers at the time of data collection had not yet qualified and were working as unqualified teachers; two others were needing to teach outside their specialisms for purposes of filling their work allocation (as their specialist subjects were insufficient to fill a full work quota). Unfortunately, the part-time staff were not available for inclusion in the analysis of teacher qualifications.

School B also exhibited a core of an 'old guard' who had been at the school for a long period of time, surrounded by more transient short-term appointments.

Non-teaching staff

In addition to these extra teachers, the school also expanded the support team to 12 staff. These included:

- One school secretary;
- A personal assistant for the principal (who also assisted with school administration);
- Three grounds staff and a head groundsman (who were also responsible for cleaning);
- A kitchen and general administration assistant;
- A social worker;

- Two full time bursars to collect and follow up on fees (these two staff also performed academic administration such as CEMIS data entry);
- Two information technology (IT) support staff who also were responsible for security and monitoring the school surveillance closed-circuit surveillance network.

The distribution of responsibilities among this group of support staff indicates the types of work School B needs to prioritise with what funds it can command. The grounds and cleaning staff for the school were a relatively small team given the school property size and the number of people who occupied the site (1018 students and 40 full time teaching staff). A full-time social worker, two bursars and two security personnel indicate that School B had significant work regarding fee collection, supporting students pastorally, and keeping the school secure. The bursars were kept occupied full-time with fee collection responsibilities (see “With what”) and were considered critical for the school’s survival. In the words of the principal regarding the two finance staff:

At least two people spend their entire life doing... either taking money or following up the debt... it’s a big deal. And you have to phone every week... and we’ve become quite smart with it! We’ve done SMSes like everybody, you know, even though you’ll get the account, you’ll get it saying, ‘you pay so much as a minimum now’, you get stronger as you go down the line... a lot of work, but you have to do it otherwise you can’t survive.

School B Principal

The two IT support staff who also doubled as security took on this dual role to assist in shepherding wayward students to class, as well as to monitor the security cameras that the school had installed in response to significant theft of IT equipment. That such efforts were necessary is also related to the concerns of where, whom and how the timetable played out in reality: the staffing provisions of the school directly reflected how the different strands of the timetable shaped the school’s rhythm.

5.3.2.2 What: curriculum

School B endeavoured to offer as broad a curriculum as it could carry. As a maths and science specialist (Dinaledi) school, it continued to encourage students towards STEM subjects for as long as possible, knowing these subjects carried higher symbolic capital than others, although the school’s NSC results indicated its students were struggling with these subjects—see Appendix D. The particularities of School B’s timetabled curriculum are now explored for each phase.

Senior Phase curriculum

School B adhered to the Senior Phase division to the letter—or at least as far as its lesson lengths allowed. Rather than explicitly reshuffling time allocation to subjects, or cutting a whole half hour from one subject, the half hour that dropped the school week from 27.5 hours to 27 was the cumulative effect of five minutes shaved off one lesson, ten off another, across the week, with the affected subjects varying depending on how the timetable fell⁴⁰.

One curriculum diversity factor at the Senior Phase was the second language offering School B assembled for its students. Many schools seek to streamline the language lesson load by only offering one additional language option (it is mandatory to take two languages to complete schooling in South Africa—see Chapter Six). Said schools then encourage students of a certain linguistic profile to apply to their school by reasoning that these are the languages the school offers⁴¹.

School B, however, had a bimodal student profile (see “Whom” and also “Where”) which was relatively evenly split between ‘Coloured’ students who spoke Afrikaans at home, and Black students who spoke isiXhosa at home. A tiny fraction of the school were Black foreign nationals who originated from Francophone countries (the Democratic Republic of Congo), who were accommodated by having French lessons after school hours (this is permitted for foreign national students who only come to South Africa late in their schooling career).

School B could not carry a class for French with their teacher and rooming provisions. But they did timetable parallel isiXhosa and Afrikaans classes for all grades⁴², ensuring students could take the languages with which they were most familiar. In addition to this, isiXhosa was also offered at Home Language level for those students who wished to engage in more literature studies (which is not offered at the First Additional level). But it is notable

⁴⁰ It was a source of irritation to the principal that the provincial department nit-picked this non-compliance in tiny slices across the timetable. He felt this was over-policing and unhelpful.

⁴¹ This is in fact against the spirit and letter of the Language in Education Policy and the Admissions Policy for Ordinary Public schools. These policies outline schools’ obligations to accommodate learners who wish to study alternative languages to those offered by the school should they exceed a certain number, and that schools cannot discriminate against applicants based on language. Slippages in these policies has historically been utilized by Afrikaans medium schools to exclude Black learners based on language (which proxies for race). Such proxying has been the subject of a court battle between Hoerskool Overvaal and the Gauteng Department of Education (2017), when the department wished to enrol a group of Black learners at a predominantly White, Afrikaans-medium school.

⁴² This is in contrast to School A where the vast majority of students took Afrikaans as their second language option since they had been learning this language since junior school. The isiXhosa department at School A lamented the ‘drop in popularity’ of taking isiXhosa as a second, as opposed to 3rd, language, and then being subsequently dropped at the FET level.

that offering both Afrikaans and isiXhosa was a necessity at School B, rather than a choice. Being timetabled opposite each other, students did not have the option of taking both.

FET curriculum

School B offered (in addition to the mandatory languages, life orientation and maths/maths literacy subjects) a spread of electives that covered the sciences, social sciences, commercial subjects, vocational subjects and small selection of arts. Their elective offering included: business studies, accounting, economics (the commercial options); life sciences, physical sciences, and IT (the science options); consumer studies (the vocational option); geography and history (the social sciences), and music.

The maths and physical science conundrum

School B did not *mandate* its students into any specific electives at the FET level. However, all students were encouraged to *try* mathematics and physical science (physics). This caused friction amongst the staff. Some believed that this encouragement helped students to aspire to loftier goals. Others believed enrolling the students when they had struggled at maths and science in the lower grades was unkind and set false expectations.

The upshot of students taking maths and physics in Grade 10 when they were already struggling was timetable attrition: as failing or struggling students crossed over to other electives mid-year (or at times, even in Grade 11 or 12), the classes of life science and history in particular ballooned. Maths literacy classes also swelled, and could not be split or redistributed since mathematics was not timetabled in a run independently of languages and life orientation (insufficient modularity). Although all students start with pure maths in Grade 10, by the end of Grade 12 only two-thirds are still doing mathematics, and of those students, only 20-30% pass. Only a quarter to a third of students who make it to Grade 12 remain enrolled for physics, and of those students, only a quarter to a third pass (based on the 2016 & 2017 NSC results—see Appendix D).

These concerns supported the position of those staff who were against encouraging students into maths and physics from Grade 10. However, the school's 'Dinaledi' status created a different set of constraints. Dinaledi schools are specialist maths and physics schools that may receive additional (conditional) grant money. Amongst the conditions for receiving Dinaledi funding is that more than 60% of students in Grades 10, 11 and 12 are registered for pure maths, and more than 20% of students across Grades 10, 11 and 12 are registered for physics (Western Cape Education Department, 2012). Given the transfer rate out of the subjects between Grades 10 to 12, sustaining 60% enrolment in Grade 12

would require encouraging every student to take maths and physics as they entered FET in Grade 10, or risk the school losing its additional Dinaledi funding (normally distributed in the form of extra staff posts for maths and science specialist teachers). These conflicting forces created dilemmas between teacher numbers, economic capital, cultural capital and the inelasticity in the timetable to cope with student movement between subjects.

Music

A fringe offering at School B was music. The principal was himself a choral master and felt that music was a particularly appropriate subject for the types of students School B enrolled (see "Whom"). However, the numbers of students taking music as a formal FET subject caused controversy in the school. In 2016, only six students enrolled to write music as a formal subject for Grade 12, and in 2017 only five students. Carrying such small elective classes caused other classes to balloon (the history and life sciences classes often exceeded 45 or even sometimes 50 students). That School B was caught between its staff's workload and offering its students a more specialist art-oriented subject is indicative of its exposed status in terms of what its timetable could stretch to accommodate.

The principal at School B felt that students' choices should not be hindered by their socioeconomic status and that it was the school's role to maximise what students could choose. The next section discusses who these students are and what forms of embodied capital they bring to their schooling.

5.3.2.3 Whom: student recruitment and 'fit' for the school

School B attracted a broad range of students from all over the larger city area. It is known as a 'commuter' school—most of the students who attend are not resident in the immediate vicinity (a formerly Whites-only suburb). While 'White flight' (Tikly & Mabogoane, 1997) had clearly affected the school at some point—being a formerly White school—the student and staff body has been almost entirely people of colour for at least the past 15 years. This is relevant only in that race is still a proxy for socio-economic status, and the students who attend School B are not the wealthiest, but also not the absolute poorest.

By the time this study was conducted, the student population at School B exhibited an interesting bimodality, being roughly evenly divided between 'Coloured' students from the Cape Flats areas, and Black students from the townships. The principal cited racial tensions as a real threat at the school, where students would fall back on racial tropes to explain

their conflicts and differences, thereby drawing lines of antagonism between larger groups of the school's community, depending on students' experienced racial affinity.

In reality, the student body was deeply heterogenous, in hue, heritage, as well as income, with one main notable absence: there were no wealthy, or White South African, students at School B (the only White students were temporary exchange candidates visiting for a term from Germany—approximately three in number at the time of this study). That is: all the permanent students at School B hailed from backgrounds with disadvantages acquired during apartheid and colonial rule.

The cultural capital such a student body brings—particularly in *habitus*—is low when considered in the frame of the field of formal basic education⁴³. Students often spoke English as a second or third language, and what forms of English they did speak were not those privileged by the education system. Many teachers spoke with despair about the students' socialization—their home environments had not dressaged them into 'ideal students' by the normative traditional school measure. Punctuality, certain forms of decorum, uniform adherence and 'code of conduct' were constant sources of conflict (see Chapter Seven for more details). The primary schools to which they had access had not been of the same 'quality' as their wealthier peers in other schools, nor had their home environments been supportive of the rhythms and habits schools expect and demand (ignoring all the other literacies and skills they *had* acquired as children which bore no fruit at school).

According to the deputies, many students came from single-parent or grandparent-headed households⁴⁴ and many students also could not afford the whole school fee (see "With what") or extras such as outings and 'Civvies Day' (when students could wear their ordinary clothes to school). The principal identified student disengagement as a serious challenge at the school, where students would be present but not participating in lesson activities and constantly requiring close monitoring by the teacher to keep them engaged or in class. While some teachers framed the *habitus* of the students as bad aptitude or

⁴³ Bearing in mind that cultural *capital* is a function in relation to *field*, and not to be confused with cultural *resource*, of which these students had abundance.

⁴⁴ While these are not essentially inferior home arrangements, they often proxy for an unravelling of the fabric of the home structure, which constitutes a problem in a society where two incomes and present parents are required for routine and stability.

'poor quality', these normative descriptions⁴⁵ obscure the symbolic violence inherent in a schooling system designed and intended for middle class, anglophone children from well-resourced, stable home environments. Very few of the students at School B had such foundations.

Grade 8 recruitment and dressage

Although not attracting the wealthiest of applicants, School B still enjoyed a *relatively* privileged position compared to fee free schools that served the absolute poorest. Between two and three times as many applications were received as could be accepted for the 210 places in Grade 8 (depending on the year), and the school still enjoyed a reputation as a 'good' school for 'disadvantaged communities' to send their children to.

Adjudicating who to accept is a tricky business: effectively, candidates are at Grade 6 level at the time of application, and junior school results are often considered to be unreliable. Places would be awarded loosely on whether a child was 'able to cope' (for example, a candidate who was failing the subject 'life skills' at the primary school level would be considered to be in very dire straits academically; or a child who was already struggling with behavioural conflicts at a young age would also be a concern). Students who were not clear-cut acceptances or rejections would be interviewed—a job distributed across the staff—during which they would write, in their own terms, their motivation for attending the school and some personal information about their interests and opinions. This information would then be used to select the 210 successful candidates who would need to pay a fee deposit to secure their place at the school.

Language posited a barrier to assessing some candidates, especially for the written application task. Applicants would often be taught English as a first additional language at the primary schools from which students were drawn, whereas School B expected English home language skills. However, the principal was of the opinion that such students may have untapped potential and would ask teachers able to converse with the student in their first language to conduct the interview (again, with disagreement from some staff, who saw English skills as paramount for acceptance into the school).

⁴⁵ Such normative framings are also upheld by officials from the provincial department. One curriculum advisor stated to a senior School B teacher (regarding the school's physical science results): "it's not the fault of the teachers. It's the learners' fault. You are not attracting decent learners here."

Islam

Of interest for timetabling purposes was that a significant percentage of the students at the school (and also the teachers) were adherents to Islam. Unlike schools where this fraction of the student body is a small minority who can slip out of class for Friday prayers (e.g. School A), such an exodus would have severely disrupted lessons at School B, and hence schooling time was arranged to finish at 1pm on a Friday. This meant that lost Friday time needed to be redistributed to other days in the school week.

But going home early on a Friday was fortuitous for all students and staff, due to the school's location. This is outlined in the next section on the school's internal space and geographic location in the city.

Inter-grade attrition

Another source of evidence for School B's students and their misfit for the game of schooling was the attrition between grades. While 210 students were enrolled in Grade 8, only approximately 180 would write Grade 12 exams in any given year, meaning that a significant number were repeating a grade or moving to other schools. The oldest student at School B was 21 years of age, significantly over the 18 year ideal for Grade 12, and had clearly repeated more than one year of schooling. Both this upper age limit and the difference in enrolment between Grade 8 and Grade 12 indicate attrition as students move up through the schooling years: such attrition manifests on the timetable through unstable student numbers per grade from year to year.

5.3.2.4 Where

Both the local infrastructural spaces of School B and the broader geographic place of the school site bore heavily on the timetable's design.

Geographical location

Formerly White schools that once served White students but now serve mostly students of colour are highly exposed to the realities of apartheid era spatial planning: these 'commuter' schools serve students from far flung areas reserved for different racial groups than that for which they were originally intended by the apartheid state. As a commuter school, the students at School B had significant distance to overcome to get to and from the school. School B is physically located in a suburb relatively close to the city centre, meaning both staff and students were caught up in the Cape Town transport rhythms with peak hour traffic (Cape Town's traffic is considered the worst in the country, and ranks

poorly on international traffic monitoring systems—see Tom Tom Traffic Index (2019)). Peak hour begins particularly early on a Friday afternoon (2pm onwards) as commuters wend their way home for the weekend.

Public transport rhythms

A significant proportion of the students relied on public transport to get to and from school. The school was located near a bus stop on a main arterial road (where teachers on duty would be stationed to usher students to school—School B had to try hold rhythm in spaces beyond its borders). Other students would take the train line that runs from the township areas on the Cape Flats to a nearby transport hub which was approximately 10 to 15 minutes' walk away from the school premises. Still others took the minibus taxis that many South Africans rely on for transport since taxi penetration across the city is far denser than that of bus networks or rail transport.

Reliance on these modes of commuting made School B extremely vulnerable to transport vicissitudes. Transport is a deeply unequal and contentious issue in Cape Town, and subject to many conflicts and interruptions. During the single term when data was collected, the central train line was shut down indefinitely due to infrastructure theft, violent crime on the train, and arson or vandalism of rolling stock. At one point during this shutdown, the bus drivers' association also went on strike, bloating the already choked roads with private vehicles (for those who had) and taxis.

When public transport does run, it is erratic and unreliable. As a result, late-coming was a serious problem at School B (see Chapter Seven). Students at times reported waking as early as 4:30am to prepare for school and take the two or three changes required to get to school on time for 8am. Sleep deprivation was identified by school leadership as an issue among the students.

To try and adapt to these realities, School B altered its timetable to a later start time of 08:30am. However, a concomitant later finishing time was not possible, again due to constraints on public transport: after a certain hour, peak price surges meant transport home was pricier for students who were already carrying a significant transport cost burden. Effectively, School B had to compress its timetable into less time, covering the same amount of curriculum as mandated in the policy documents without compromising many of its students' ability to move between school and home. To this end, the break times during the school day were reduced from two to one break of only 40 minutes (30 minutes on a Friday), with three hours of contact time either side.

The change was not popular: students and teachers complained of exhaustion, although the principal was convinced the change was worth the attempt to find a solution to the school's late-coming issue. Disruption (and resultant discipline practices) around late-coming are discussed more in Chapter Seven. But such was School B's exposure through its geographic location that the timetable itself had to be adjusted in response.

Teaching spaces

School B had a total of 36 full sized classrooms: two were computer labs for teaching information technology; one was equipped with cooking stations for consumer studies; and one had formerly been a woodwork room and had vestiges of machining equipment (and now had a portable keyboard for teaching music).

Two smaller rooms were also used for teaching purposes, one as a music room (with a piano), and the other just as a normal classroom (although it often took a large number of students as it was the room of a senior life sciences teacher—see Chapter Seven).

The library also served at times as a classroom, and had sufficient seating for a small class. The internal library *office*, however, was the site of the school security monitoring system and was used for this purpose rather than for the library itself.

The Lower Media Room had a more fluid furniture and seating arrangement, and was often used for classes, although it also doubled for a grade assembly on Wednesdays. Overall, using the library, media room and smaller classrooms, School B had 40 regular teaching spaces in total.

Outside the media room was the main hall foyer: not a classroom, but a large open space where grade assemblies would be held, and also where unattended or truant students would be gathered for oversight by school management. The foyer was also at times used for indoor sport. The main hall itself would also be used for indoor sport, dance classes and assemblies.

Some, but not all, classrooms were equipped with overhead projectors, and staff would use their own devices to connect to the projector at school for overhead presentations (see Chapter Seven for the effect of this technology on space use).

Most full-size classrooms could fit 30 students comfortably, and 35 snugly (the average class size at School B). While there were sufficient rooms to run classes concurrently (given the limited subdivision of groups into runs), the school's ability to utilize what space it did have was affected by conflicting space use and security.

Security

Relevant to the timetable was teachers' deep reluctance to share venues. While some staff saw this as just self-interested behaviour, others felt they couldn't entrust their rooms and materials to another's care, nor were they willing to take responsibility for colleague's room, when the risks involved meant they could carry the can for loss or damage beyond their control. School B had an internal security problem (see Chapter Seven) and hence these concerns were not unfounded.

Tight coupling of venues with staff members meant the timetable itself listed no venues: the designation of a teacher was simultaneously the designation of their room. It is unclear how roving teachers chose rooms, but towards the end of the term, two rooms once used by staff who had left were redistributed, and the library was made into a permanent classroom to ensure all teachers had a room of their own.

As will be explored in more detail in Chapter Seven, this ossification of rooming due to security concerns, as well as the competition for space between fund raising activities and classes, created arrhythmias that were not in keeping with the timetable's nominated rhythm.

Non-teaching spaces

In addition to the teaching venues listed, School B had a significant amount of non-teaching space. These included:

- The principal's office;
- The principal's anteroom for his personal assistant, which merged with the reception desk;
- A wood panelled school foyer for receiving parents and for the staff entrance;
- A staffroom with attached kitchenette, adjacent work room and a small courtyard;
- A bursar's office with a strong-room, also used for printing and reprographics;
- An academic administrator's room, used by debt administrators;
- A room for the social worker;
- A room for the school counsellor;
- Nine offices for deputies, heads of department (HoDs) and some grade heads;
- A science materials store room;
- A tuckshop with attached kitchen which was run as an independent enterprise by a group of women not employed by the school.

Storage was a significant concern. Most learner and teacher support materials (LTSM) were kept within classrooms, with very meagre cupboard or shelving space. Three under-stairs storage areas had to house sports equipment, maintenance equipment (although there was an outside workshop for this also, housed in an old garage) and textbooks. The staff-only corridors outside some senior staff offices was also filled with tables piled with materials. Student's storage facilities were inadequate: for over a thousand students there were only 144 student lockers, of which eight were door-less, five were empty and unused, and two were in use but without a padlock.

Between storage and security, managing space at School B was a challenge. The effects of these challenges on school rhythm are discussed in more detail in Chapter Seven.

Infrastructural condition

While the quantities of space at School B were tight but sufficient, the qualities of these spaces also affected teaching and learning, and some had effects on the timetable's design (the impact of these qualities on timespace-lived and perceived is explored more in Chapter Seven).

In particular this affected what could *not* be done with the timetable for the physical science department. In the words of the school timetabler:

Our practicals are done differently to other schools. In the sense of your physics prac. (sic) If you look at T____, he doesn't go to the physics room to do his prac.: it's just done on paper. Other schools will look at the loading of specialist rooms (into the timetable). Now the top schools will look at that. We've got two specialist rooms, we've got three physical science teachers.

School B Timetabler

What the timetabler meant by 'specialist rooms' were the two normal classrooms that also had sinks. The actual practical lessons for physical science could not be accommodated by the school at all, as the science storeroom had a significant damp issue and the materials stored therein were compromised. One physical science teacher explained her dream of revamping the science storeroom so that the school could rebuild its own equipment and supplies and not rely on an external party (a privately-funded donor organisation) to come run science practicals once or twice a year for a short period. She indicated the damaged walls and ceiling and despaired at the financial outlay required for the project.

School B would struggle to upgrade and maintain its specialist spaces due to its financial condition. The building structure itself was 'over-engineered' like School A (and would not

have weathered the lack of maintenance otherwise), but persistent decay without repair meant the rooms were not functioning optimally, and long term issues such as leaks and damp had caused significant damage which regular maintenance could have prevented. As is discussed in Chapter Seven, School B's financial circumstances made such preventative investment almost impossible. The effects of finances on the school's timetable are explored next.

5.3.2.5 With what

Due to its geographical location⁴⁶, School B is designated as Quintile 5, and hence is also permitted to charge fees to supplement state allocated funds. For the 1018 students enrolled at School B at the time of data collection, the R228 from the state per child amounted to R232 104 for school materials and buildings.

Supplementing state funds: fees

School B raised a significant volume of its supplementary economic capital through fees. Despite serving a relatively poor student base, School B charged R17 500 per child per year for the year during which this study was conducted.

However, the poverty of its students is reflected in School B's fee collection success. A 'good year' was collection that exceeded 65%. In addition to this, payment was often sporadic over the year, with fee fealty declining from May, and being variable across the different grades (according to the deputy principal, students in the older grades were less inclined to pay fees as they perceived their time at the school to be coming to an end and the money less worth the investment).

School B hired two full time staff to chase fees, but the total for the year collected came to approximately R11 500 000 (+/-65% of the total potential amount).

Supplementing state funds: fund raising

School B actively pursued alternative funding through infrastructure subletting and events. Fundraising through raffles, donation drives and events such as the annual fashion show raised approximately R150 000 a year. Venue hire—both ad hoc and regular—raised an additional R2 000 000 p.a. The bulk of venue rental came from a section of the school's

⁴⁶ Since annually assessing the socioeconomic status of each student is too onerous, a school's location is used as a proxy for the wealth of the students it serves, a categorisation that falsely assumes students go to their nearest school. This is discussed in more detail in Chapter Six.

land that had been cordoned off and turned into rented parking bays for an adjacent office block. The principal was emphatic about how much the school depended on this revenue stream: “we’d be dead if we didn’t have that. Actually dead.”

The school had (in the early days of democracy) sold the parcel of land on which the adjacent office block was built, a strategy used to compensate for falling revenue streams once schools for Whites were no longer the financial priority of the government. However, capitalising on real estate in this manner was no longer viable (all the school land is now state-owned land), and what capital had been raised by the sale has long since been depleted⁴⁷.

Financial liquidity

One of School B’s greatest challenges was financial liquidity. Students would often pay fees in monthly instalments, and each month varied as to what came in. According to the deputy responsible for finances, a bad month would only see 30% payment, and a good month would be around 60%. What could be spared in the better months from January to April would be set aside to see through staff salaries in the leaner months from May:

Out of that you have to cover your salaries. And it’s bad at month end. You don’t want to... I had to do salaries ‘cos (the principal) wasn’t here and I never want that job back again—you age by the month! Because I will tell you... you sleep from the first to the tenth, you can sleep, after the tenth you worry how are you going to get that money in for the thirtieth.

School B Finance Deputy

This precarity for school-employed staff (whether teachers or non-teachers) clearly stressed the staff of the school, as well as the management:

The cash flow is sooo tight! And then there’s days that, I mean, you ask people ‘ok, you’re gonna get half today, and two days’ time you’ll get your other half’...

Interviewer: Are people quite understanding about that? Are they quite generous?

yes, yes, and no. Because it puts pressure... sometimes the school even has to pay for any bounced debit orders (for teachers) and you have to pay that, like, your hundred rand for... so I mean that’s part of your finances it’s terrible if there’s no money.

School B Finance Deputy

⁴⁷ Such a strategy is, of course, not sustainable for school running costs such as salaries, although it might seem a tempting option in tight years.

It is not unreasonable to expect that staff who are not being paid timeously would also be reluctant to be flexible when asked to cover for absent colleagues, or to go to the additional effort of moving around the school to do so. Although liquidity of economic capital is not directly reflected in the timetable, the issues previously discussed about the (in)elasticities of space and staff are. School B's exposedness is in keeping with their short financial horizons and their inability to plan far into the future as a result. This will be discussed further in Chapter Seven when the rhythms of the school are described against the timetable's intended routine.

Reduced staff

In addition to economic capital precarity, School B had also lost a post funded by the government, and was also needing to reduce the number of school-funded staff in response to financial constraints:

In terms of governing body staff, our budget is tight, and so we have to try and cut the number of posts, but we could cut in different areas: we can cut in different areas, but we can't just get rid of staff, you know... so one hopes there'll be a little bit of pain while you cut, and a few people go, and then you can re-advertise what's appropriate. And we did apply for—we lost a post from the state, I still don't understand how they could do it, but we did. Ya, they're always playing games with you, you know, you work it out... our numbers dropped a little bit, by about 15 (students), and then we lost a post! We were safely in the ratio, but we lost it. Then we went up, down—substantially! Recovered that, and 20 more, and then we asked for the post back, and they just turned us down.

School B Principal

This staffing precarity also affected the timetable. Although the timetabler had started the process in September, the loss of a staff member over the December holidays had affected the whole timetabling process. The resignation of another member of staff due to prolonged stress-related health issues on the third day of the school year exacerbated the situation further, requiring her classes to be redistributed to colleagues. Another member of staff was booked off following the death of her spouse, and yet another suspended pending a disciplinary hearing. School B simply lacked the economic capital to weather such knocks: their budget was too tight to adapt by hiring additional staff, resulting in significant strain on existing teachers as the timetable was tightened to redistribute work.

Inappropriate quintile

Quintiles are a form of redress spending by the state, although the transfer from the wealthiest students to the poorest is relatively small in absolute terms (See Chapter Six). Quintile 5 is intended for the wealthiest students, who are clearly not School B's clientele.

The deputy principal indicated that the school actually serves students from Quintiles 1, 2 and 3 (i.e. if the students attended schools where they lived, these would be fee free schools), and that the school had been 'trying to get out of Quintile 5'.

But this strategy could backfire. While School B didn't collect anywhere near its full fee allocation, it did at least collect some fees. The difference in state spending it would receive if designated a fee free school would not compensate for what School B was collecting, nor support the additional staff they hired to do the work around the school. School B was in fact selected as a site for this study precisely because it represented the thin end of the (in)adequacy wedge: if a school managing to gather at least this supplementary funding is struggling to construct sufficiently elastic timetables and rhythms of teaching and learning, then how schools without any supplementation are managing is of concern.

Adequacy questions withstanding, the position of School B highlights the weaknesses in the quintile distribution policy. This policy is discussed more in Chapter Six.

School B did attempt to claim back from the state the funding difference for its fee exempt (or partially exempt) students, but this funding often arrived up to 18 months after application, and did not relieve the school's liquidity issues. There was some resentment from the staff about the education department's seeming inability to comprehend how expensive schools are to run:

You find if you write off 2.5 (million)... then you will read in the newspaper the WCED or the education department—how they 'reboot' the schools in terms of how they support the learners or whatever... financially the schools, how they 'pay for the child that can't afford', but you get back a hundred and forty thousand (rand) to cover that two point five (million)... They blow it up in the newspaper and on social media as if it's equal to what the school (lost).

School B Finance Deputy

Comparatively, School B's forms of economic capital were far better than the average school, but analysis of their timetable suggests a different question: that of adequacy for the job at hand. This chapter closes with comparisons between School A and School B's timetables and their qualities, asking what contrasts between the two might suggest about timetables as indicators of fortifiedness and exposedness.

5.4 Similarities and differences: how the timetables compared

The roots of the differences in the timetables between each school can be traced to the forms of capital they had available to them to forge this critical artefact. Some of the key inputs for timetabling at both schools are summarised in the following table:

Strand	Timetable input	School A	School B
Who	<i>Full time teaching staff (state)</i>	26	28
	Full time teaching staff (SGB)	32	12
	Part time teaching staff (SGB)	0 (2) ⁴⁸	4
	Non-teaching staff	35	12
Whom	Students	910	1018
	Normal class size	30 (26)	35
Where	Teaching rooms	46	40
What	SP subjects offered	16	10
	FET subjects offered	20	18
With what	<i>State funds</i>	<i>R207 480</i>	<i>R232 104</i>
	Fees per child	R37 420	R17 500
	Fees collected	+/- R30 300 000	+/- R11 500 000
	Fund raising	n/a	+/- R2 150 000

Table 5.3 Quantities of key inputs for timetabling across both schools

Table 5.3 shows similarities and differences in private and public provisioning for both schools: while each school had similar numbers of state-provided teachers, their school-hired (SGB) staff different by almost a factor of three (across teaching and non-teaching staff). While School A divided 180 students per grade into six equal groups of 30, their unbundling of the curriculum and modularity in their timetable made most of their classes closer to groups of 26 students. Where School B did have smaller groups than 35, this was at the expense of other groups growing to 50 or more students.

The extra SGB staff hired meant that lesson loads were also different for P1 teachers across each school.

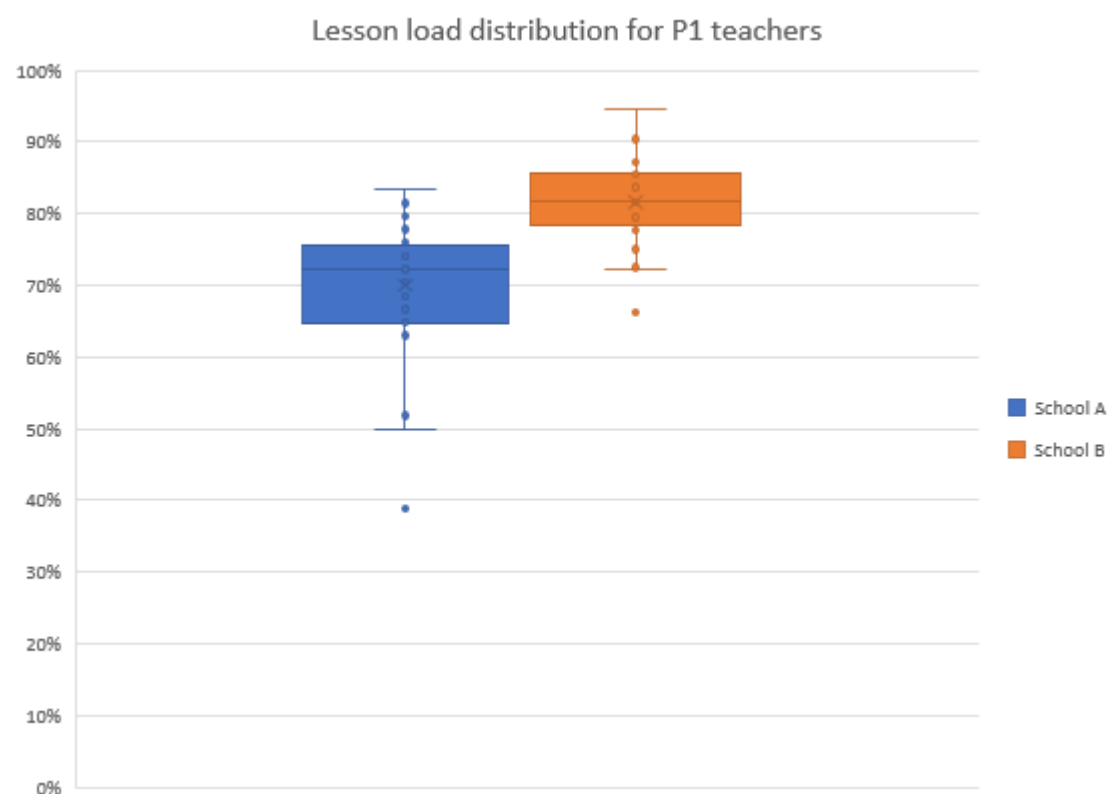


Figure 5.2 Lesson load distribution of post level 1 staff at School A and School B.

Figure 5.2 above shows the quantitative difference in workload between the two schools for post level one teaching staff: the upper most load at School A was close to the median load at School B; the lower most load at School B (excluding one outlier) was similar to the median load at School A.

The following table compares the properties and qualities of each timetable using the analytic categories of elasticity, modularity and granularity:

	School A	School B
Granularity	School A's lessons were totally regular at 30 minutes across the 5-day cycle.	School B's lessons varied from 50 minutes to 70 minutes, with Week 1 subtly differing from Week 2 in the 10-day cycle.
Modularity	School A's timetable was highly modular, with all FET subject groups timetabled in runs, and 2 nd language and maths in runs at the lower grades. Aggregate subjects were unbundled into their constituents, which were timetabled in parallel where an elective was to be taken, or scheduled to specialist teachers where all components of the subject were mandatory.	School B's timetable was modular for languages throughout the school, and for FET electives. The remainder of the timetable was enmeshed due to staff limitations, creating knock on effects with minor changes and making concurrent assessment difficult inside the usual timetable schedule.
Elasticity	School A's timetable exhibited significant elasticities, with between 10 and 18 free teachers at any one time (excl. the principal and the teachers on substitution duty). Teachers' meetings were mostly scheduled within school time since the modular timetable and staffing slack made this possible. The average lesson load for a classroom teacher with no leadership responsibilities was 70%, with the highest load at 83% and the lowest at 39% (school librarian). The 'normal' class size at School A is 30 students. The maximum never exceeded this number. School A also had an abundance of rooms, including specialist rooms for science, art and music. The computer lab was available for booking for all classes. The library was used by the librarian when she taught (39% unavailability).	School B's timetable exhibited some elasticities, although these proved marginal in the face of day to day realities. Normally between 7 and 10 teachers would be free at any one time (since meetings were scheduled for before school). These teachers would have to cover substitution for absent colleagues. The average lesson load for a classroom teacher with no leadership responsibilities was 82% of total lesson allocation, with the highest load at 95% and the lowest at 65% (school counsellor). The 'normal' class size at School B is 35 students. The maximum however reached up to 50 when electives were inflexible to student preferences. School B's rooms were sufficient, but mostly generic. Two rooms had pianos for music when necessary, two classrooms rooms doubled as computer labs, and one room had cooking equipment for consumer studies. No librarian. When not in use for a class, the library was locked.

Table 5.4 Similarities and differences between the schools in timetable qualities.

5.4.1 Consensus and conflict over the timetable

The timetable arrangements generated different reactions in each school, despite both schools going to significant lengths to consult and negotiate across the staff body when designing the artefact. In School A, there was general consensus and satisfaction with the timetable. But in School B, senior management would have strong differences of opinion about the correct resolution of the compromises School B was faced with.

The lack of elasticities, as well as the cultural capital and habitus of School B's students, meant that maximising the schools' results was not in keeping with maximising the school's curriculum offering to students. One of the most notable differences between the two schools was how they could carry the electives they offered their senior students. At School A, the approach was "if a child wants it, we will find a way to accommodate it". School B, however, suffered significant inter-staff conflict about what types of subjects should be offered and whether these were an efficient use of what resources the school had available.

In reality, both schools had similar numbers of subjects on offer, with some minor differences. School B's offering was more focused on business selections and had less in the way of the arts. School A offered few commercial or vocational subjects (only accounting), and opted to offer languages and the arts instead. While School B did not oblige its students to do specific subject selections, School A mandated its students take one science subject in order to maximise the student's national senior certificate score for entry into university. The following table shows enrolment numbers across the subjects written in 2016 and 2017 for the National Senior Certificate final exams by both schools:

	School A		School B	
Subject	2016	2017	2016	2017
Accounting	31	43	21	30
Afrikaans FAL	177	168	86	73
Arabic SAL		1*		
Business Studies			65	78
Consumer Studies			39	36
Dance studies	1*			
Dramatic Arts	4*	2*		
Economics			61	61
English HL	182	178	187	173
French SAL	26	19	5*	1*
Geography	72	62	77	59
German SAL	1*	1*		

History	101	107	83	90
isiXhosa HL			28	49
isiXhosa FAL	4	9	65	43
isiXhosa SAL	12	6		
Information Technology	7*	1*	12	19
Italian SAL	3	3		
Life Orientation	182	178	187	173
Life Science	152	143	134	104
Maths Literacy	37	27	64	59
Mathematics	145	151	123	114
Music	8	8	5	6
Physical Sciences	119	118	67	43
Visual Arts	23	26		

Table 5.5 Exam enrolment per subject for NSC across both schools.

School B's timetabler inadvertently⁴⁸ compared their curriculum offering to School A's during discussions, believing that School A's success was somewhat attributable to a narrowing of elective options by insisting on a science elective (and the concomitant reduction in timetable complexity). This wasn't the case: what really made School A's timetable less cumbersome and inflexible was their rooming and staffing elasticities that meant they did not have to trade off a student's unusual subject interest against the school's resourcing availability. Table 5.5 shows that, despite mandating a science elective, School A offered more NSC subjects and often to smaller groups, than School B.

In School B, however, runs of electives were at most divided into seven classes from the normal six classes per grade. School A, by comparison, sometimes divided a run of six classes into nine or ten separate elective groupings. This meant that, at School B, offering unpopular or small class electives was zero-sum: what benefitted the student selecting fringe subjects such as music or drama negatively affected their peers in more mainstream classes such as life science or history (and, by extension, the teachers of those classes). For School B to carry a small class of less than ten students meant that another class grew to 50 students or more. This zero-sum character of offering niche subjects created significant politics between staff in School B. The elasticity in School A's rooming and staffing quota neutralized these competitions for scant resources that were visible in School B and its dilemmas regarding which electives to offer.

⁴⁸ Neither school was known to the other during the study.

* subject taken off timetable

Both schools also encouraged students to take maths as long as they could, before moving to maths literacy. However, School A's timetable modularity meant that this 'try and see' approach to maths before 'downgrading' to maths literacy could be contained within the maths department without knock on effects on class sizes elsewhere in the curriculum. School A timetabled mathematics against maths literacy in runs, and had ample mathematics staff to cover all classes simultaneously. School B lacked the staffing numbers to do so, especially after losing two maths teachers in the first term. Thus, while School B also attempted the philosophy of 'try pure maths as long as you can and go to maths literacy as a last resort', this had significant consequences when those students opted mid-year to change to maths literacy.

The two main consequences of the differences in elasticities between the two schools were the distribution of students through elective classes and the conflicts (or lack thereof) this created between staff. The difference between fortifiedness and exposedness was that, in the fortified school with elasticities (A), student benefits did not come at the cost of other students or staff, whereas this was not the case in the exposed school (B).

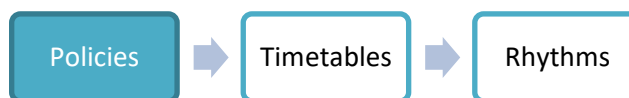
5.5 Conclusion

This chapter has laid out in detail the qualities and properties of each school's timetable, and the forms of capital that underpin these. Using the analytical framework from Chapter Four, the five strands stretched and tangled through each timetable's inputs and the inter-related factors that shape a school's daily schedule. The triad of timetable qualities—granularity, modularity and elasticity—enabled methodical analysis of each timetable, as well as comparison across timetables.

But the origins of these discrepancies in two schools with similar historical origins, and in similar geographical locations, is not clear. The next chapter explores the policy origins of the distinction between the two schools and how one has come to be fortified, and the other exposed.

6.

Policies undergirding timetables



6.1 Introduction

Having established the form and nature of the official timetable for each school in the previous chapter, the analysis now turns to examine the policies that shaped these artefacts. Policy documents were identified by using the timetable as a lens, asking which texts affect each strand: who, whom, what, with what, and where.

Starting at the level of the relevant national policy documents, the chapter traces the layers of enactment through provincial structures to the level of the schools. For each school in this study, school take up of these policies is examined in relation to the forms of capital they have available to build timetables, connecting to the timetable inputs outlined in the previous chapter. In this way, forms of capital are connected to policy arrangements as they play out in context.

But forms of capital cannot be considered a-temporally or a-spatially, as argued in Chapter Two. What constitutes capital in a field is as much a function of timing and access as of substance. Each policy tract, then, is also examined for how it avails or constrains forms of capital *in timespace* i.e. how that policy conceives of schools timespace and rhythms, particular regarding when and where forms of capital are, or are not, available.

This study takes a synchronic snapshot of existing policies as they reach through timetables into school rhythms—that is, the focus is on how a policy moment plays out in everyday activities, meanings and arrangements, and how these are implicated with (re)producing social inequality. But it is worth stating that this position does not seek to reify policies as fixed, uncontested or ahistorical. Rather the study brackets out the policy process more generally as not visible through the lens of the timetable itself, while acknowledging that rich discursive and historical understandings of how policies come about and how they represent the political (Ball, 1993) are important.

6.1.1 Policy tracts under consideration

As a reminder from Chapter Four, Table 6.1 below indicates the four main policy threads and their relevant extracts for analysis for this study.

Policy text	Acronym	Sections	Strands
The National Norms and Standards for School Funding and related South African Schools Act sections	NNSSF SASA	SASA (1996) Chapter 4 NNSSF (2006) Amended NNSSF for 2018 Regulations for parents exempt from school fees (Fee exemptions) WCED Circulars 0041/2016 and 0005/2018	With what (Whom) (Who) (Where)
The Personnel Administration Measures, particularly the Post Provisioning Norms	PAM PPN	Chapter A Annexures A1 and A2 WCED Circulars 0028/2017 and 0031/2009	Who
The Admissions Policy for Ordinary Public Schools	APOPS	Sections 1 through 18; Sections 26 through 40; Section 43 WCED Circular 0040/2016	Whom (Where) (With what)
The National Policy for Promotions and Progression Requirements of the National Curriculum Statement	NPPPR	Chapter One Chapter Two, section 3 Chapter Five Chapter Six	What

Table 6.1 Policy extracts shaping forms of capital for timetabling

Once again, the strands are used to organise the discussion. As mentioned in Chapter Four, the relations between the strands and the policy documents are not one-to-one. Rather, for clarity of sequencing, the most influential policy for each strand is explained first, with relations to (and implications for) other strands and policies discussed as they arise. To avoid repetition the order of the strands is changed in this chapter to sequentially develop the discussion of these policies and their interactions clearly.

The analysis begins on the strand with what to discuss schools' access to economic capital: Chapter Five suggested the ubiquity of this strand in amongst the others. With what is followed by who and whom, to relate economic to embodied and objectified cultural capital that manifests through the teachers and students. The curriculum (what) is then discussed, as are its effects on student enrolment.

Finally, the strand where is considered: this strand stands out from the rest in its notable absence of a *reaching* policy. The existing contested frameworks regarding school infrastructure and transport remain symbolic (Jansen, 2001) while court cases continue to enforce their enactment. Until such enactment, school spatialities continue to be defined by the past at work in the present, through historical infrastructural inheritance (apartheid-era school design) and geographic distribution (apartheid-era spatial planning).

For each strand, the relevant policy extracts are discussed in accordance with

- how they shape schools' access to forms of capital (including embodied cultural capital, i.e. habitus);
- how they conceive ideal timespace use in schools to organize rhythms of teaching and learning, particularly through when, where and how capitals are availed;
- how they interact with other policies (where appropriate).

Having described the policies in this manner, provincial and school enactment is discussed.

6.2 With what: public and private funding

The strand governing schools' access to economic capital is primarily governed by the National Norms and Standards for School Funding (the NNSSF), a constellation of documents that shape how schools can supplement state financial provision.

6.2.1 The NNSSF

The main framework of the NNSSF is an offshoot of the South African Schools Act. It was promulgated in 2006 as a pro-poor intervention to prevent schools that served poor students from barring access to education by charging fees (up until 2006, all schools were permitted to do so). In lieu of fees, the 60% of schools that served the poorest students would be given a greater per student allocation than the other 40% in a redress system premised on five equal quintiles.

The NNSSF is amended annually by the minister each academic year. This amended content is two-fold:

1. the provincial distribution of quintiles is updated, stating in what ratios each province may declare schools as fee charging or not, and;
2. the increased annual allocation per student for these different types of schools is published, with poorer schools receiving more than wealthy schools.

6.2.1.1 Forms of capital

The primary regulation of capital access in the NNSSF is whether a school is permitted to charge fees or not. The policy outlines the Minister of Basic Education's responsibility to designate all ordinary public schools in the country into five equal quintiles, ranging from Quintile 1 (Q1: the poorest) to Quintile 5 (Q5: the wealthiest).

Since 2013, the poorest three quintiles (Q1, Q2 and Q3) have been allocated the same amount per student, and all schools in these quintiles categorized as no-fee schools, making them almost totally financially dependent on the state. Q4 and Q5 are fee-charging schools, where Q5 schools are considered the wealthiest, and Q4 less so.

The quintile system was intended as a form of pro-poor redress. It was introduced to identify and support those schools that required extra public funds in lieu of private fees that their attending student body could not afford. The table below outlines the public spending differential in favour of no-fee schools in 2016, 2017, 2018 and 2019:

School type	2016	2017	2018	2019
No-fee schools	R 1 177	R 1 243	R 1 316	R 1 394
Q4	R 590	R 623	R 660	R 699
Q5	R 204	R 215	R 228	R 241

Table 6.2 Per student allocation for non-personnel expenditure 2016-2019.

What Table 6.2 shows is that the *public* non-personnel expenditure on the poorest schools is almost six times that spent on the wealthiest. Superficially, this difference in expenditure seems extremely pro-poor, and the policy is replete with statements of this intent.

There are, however, three fundamental issues with the policy: firstly, the magnitude of private supplementation that fee-charging schools can command; secondly, the accuracy of quintile categories relative to the socio-economic status of the students at a school, and; finally, the assumption that, in general, legal fee-charging status translates into fee collection.

1) Private versus public funds: direct access to economic capital

The funds that fee-charging schools can potentially command from private sources dwarf those supplemented by the state. Fees in excess of R25 000 or even R40 000 per student are not unusual in wealthy public fee-charging schools.

Chapter 4 of the SASA entitled "Funding of Public Schools", under Section 34 "Responsibility of the State", states:

34 (1) The State must fund public schools from public revenue on an equitable basis in order to ensure the proper exercise of the rights of learners to education **and the redress of past inequalities in education provision.**

It is questionable whether a policy that enables wealthy students and their families to shore up their schools' finances in excess of 20 or 30 times that which the state provides to poor schools is in line with the 'redress of past inequalities'.

While no-fee schools are forbidden from charging fees, they are still mandated to seek supplementary funds:

36 Responsibility of the governing body

- (ii) A governing body of a public school must take all reasonable measures within its means to supplement the resources supplied by the State in order to improve the quality of education provided by the school to all learners at the school.

(SASA, S.36, my emphasis)

What is 'reasonable' and 'within means' varies enormously across class and location. This differentiated access to 'means of supplementation' is significant. For schools whose attached students and their extended networks lack economic capital, the main avenue of fund-raising recourse that remains, then, is utilizing the infrastructure they have:

A governing body may, with the approval of the Member of the Executive Council—

- (ii) **lease, burden, convert or alter immovable property of the school to provide for school activities or to supplement the school fund of that school;** and

- (ii) allow any person to conduct any business on school property to supplement the school fund.

(SASA, S.35(4)(a), my emphasis)

Subsection 35(4) quoted above enables schools to realise capital from the infrastructure they are given, to the limits that they can, which is contingent on the type of infrastructure they have available, and the types of clientele they can attract. Both these forms of capital (economic and social) are functions of geographical space as well as infrastructure.

The first logical concern, then, is that schools' capacity to supplement state provision with private funding is deeply contextual and likely to align with existing inequalities.

2) Accuracy of quintile designations

The second concern about how the NNSSF avails forms of capital to schools is the accuracy of schools' quintile designation. Section 87 of the NNSSF states the following as the definition of the key term 'national quintile for public schools':

National quintile for public schools: One of five groups into which all South African public ordinary schools are placed, **and where the grouping is according to the poverty of the community around the school.** Quintile one is the most poor quintile, quintile two is the second-poorest quintile, and so on.

(NNSSF, S.28, my emphasis)

This definition clearly assumes that students go to school in the vicinity of their residence, and that a school's location is a good proxy for the socio-economic status of the students who attend there. The policy does not make allowance for the highly mobile student population of post-apartheid South Africa (see Hunter (2010, 2015, 2016) for detailed studies of student mobility). Schools located in wealthy areas, then, that serve poor students, are particularly vulnerable as they are funded as wealthy schools when in reality they are not.

(It is notable that while poor students elect to go to schools in wealthy areas that benefit from the superior investment made by the apartheid state in schools for whites, this relation is not symmetrical: wealthy students do not elect to attend schools in poor locations, and to the author's knowledge there are no schools in poor areas benefitting from public redress spending on a wealthy student population—see Soudien (2004)).

3) Fee charging vs. fee collecting

The third concern about the funding policy is the assumption that schools designated as fee-charging are in fact able to collect these fees. While the NNSSF makes allowance for a school to have fee-exempt students funded by the state at the same rate as a no-fee school student (see "Fee exemptions"), the process of claiming this allowance is onerous and hard to imagine as viable when applied to a critical mass of the total school population. The tacit assumption is that the exempt student is the exception, not the norm.

Silences in the funding policy

One of the silences in the NNSSF is no upper limit on private subsidization of schools. Of the three mechanisms of subsidisation—donations, fees and rental income—the most reliable (fees) is off limits for poor schools. Donations require social capital and access to networks of patronage and philanthropy. Rental of physical space requires having a

desirable location and facilities, as well as access to a rental market that can afford rental charges—highly unlikely for schools located in impoverished areas balkanized by apartheid geography. Wealthy schools, however, are far more likely to have access to all three forms of supplementary income as they are:

- able to collect fees from a wealthy student base
- positioned to access rental markets in wealthier areas, along with desirable infrastructure, and
- endowed with social capital through their parent and alumni communities.

Neither the NNSSF nor the SASA place an upper limit on wealthy schools' potential to maximise these revenue sources.

A second semi-silence in the NNSSF is its unresolved acknowledgement (NNSSF, p.28) that personnel costs (i.e. staff) constitute the lion's share of school spending and should also be subject to redress patterns of distribution. The largest proportion of public spending on ordinary public schools—namely publicly funded staff⁴⁹—remains equal, and includes very little redress allowance. The Post Provisioning Norms (PPN), examined under who, do not take a school's quintile into account. Hence, currently only approximately 20% of the budget for public schools is pro-poor.

Decoupling location and money: fee exemptions

One component of the funding policy in allows decoupling between a school's quintile category (based on its location) from enrolled students' ability to pay fees: this is the policy of fee exemptions. Schools are (in principle) not allowed to discriminate against students based on their socio-economic means, and guardians or parents can provide documentary evidence of the ratio between the school's annual fees and their total household income to apply for fee exemption.

⁴⁹ The National Treasury of South Africa estimates staff costs to be 80-85% of all funds allocated to fund public schools.

According to the Regulations for the Exemption of Parents from Payment of School Fees ('Exemption Regulations') (Department of Education, 2006b):

- a school fee that is **higher than 10% of total household income** qualifies the student for **total exemption**;
- **between 3.5% and 10%** qualifies for the student for **partial exemption** (for one child only)

These lower thresholds diminish if the parent has more than one child enrolled at fee-charging public schools.

Automatic exemption is extended to children who are orphaned, abandoned, lived in households with social income grants, living in a foster home or youth care centre, or are living in a child-headed household (Exemption Regulations, S.1).

The Exemption Regulations provide detailed look-up tables and formulae on how schools are to calculate a parent's exemption status. But the work of collecting household income data, documentation and affidavits, as well as performing exemption calculations, falls to schools. Schools must also collect fees from non-paying parents who are not exempt. Both these tasks create work intensification at the level of the school.

Exemption is premised on the *relation* between school fees and household income, which plays out in uneven ways in the context of the extreme economic inequality in South Africa. The table below describes three examples of school fees (low, medium, high) in South African terms, along with the household income required for partial or full exemption thresholds to be met, and the percentage of South African households that earn these approximate sums (based on the SALDRU (2019) Income Comparison Tool).

All figures are for one child's fees only (that is: the percentage of households eligible for partial or total exemption **goes up for** more than one child). The average household is assumed to have four members:

School fee per child p.a.	Income exemption threshold (total)	% SA households qualified for total exemption	Income exemption threshold (partial)	% SA households qualified for partial exemption
R5 000 ('low')	R50 000 p.a.	47.5%	R142 857 p.a.	77%
R15 000 ('medium')	R150 000 p.a.	77.5%	R428 571 p.a.	92.5%
R40 000 ('high')	R400 000 p.a.	91.5%	R1 142 857 p.a.	98.5%

Table 6.3 Households qualifying for total or partial exemption from school fees.

Based on this data, the vast majority of South Africans qualify for exemption from school fees: far more than the 60% envisioned in the NNSSF. Given that 40% of schools (Q4 and Q5) are *expected* to supplement state funding with fees, such high exemption thresholds seem contradictory until exemption is framed as a *relative* measure between fee and income. Thus, charging high enough fees will qualify even households earning relatively high incomes for exemption (see Appendix F for a more detailed table of these exemption threshold calculations).

Although the state does compensate schools for lost fees, the recompense is only the balance between the Q4 or Q5 allocation and the no-fee allowance per student i.e. between R600 and R1000/student (for the year under examination). This is poor recompense for the fees in excess of R5000 per student lost to exemption, and what the state provides to no-fee schools is questionable regarding its adequacy (see Chapter Eight).

In addition, the *timing* of the state reimbursement for lost fees makes assumptions about schools' financial liquidity (i.e. access to forms of capital over timespace). The next section outlines the tacit assumptions in the NNSSF about timespace, particularly regarding school finances.

6.2.1.2 Funding policy and timespace-conceived

The processes outlined in the NNSSF for managing the collection and distribution of economic capital in schools is premised on particular assumptions about the flow of capital in the school's timespace. As suggested by School B's description in the prior chapter, the timing of payments and the liquidity of capital is important to the rhythms that the school can sustain. Bourdieu also foregrounded in his *Logic of Practice* (1990) that the effective deployment of capital in a field is not just a function of access, but also of timing. The next section briefly describes timespace as assumed in the NNSSF.

Privately sourced funds are fungible, but public funds are not

The SASA stipulates regulations on publicly sourced funds which are not equally applicable to privately sourced funds. Schools able to command private supplementary income, then, are better positioned to respond to unforeseen costs or circumstances since they can move economic capital from one area of concern to another without risking non-compliance with legislation. Privately sourced funds are more liquid across timespace.

Monochronic, bureaucratic timespace in school budgets

Throughout the NNSSF and the SASA more broadly, issues of budget management are framed in monochronic, clock-based, linear time. Two particular sections illustrate this phenomenon: the annual process of budget approval, and the process of applying for no-fee allocations for students who are granted fee exemptions. In both instances, the monochronic timeframes positioned are not only linear and static, but also extremely *bureaucratic*, requiring long horizons for lengthy process adherence which provides little agility to schools with an urgent expense to negotiate. Given schools' inability to enter into debt (see the SASA for more details), the difference in pace between the policy's bureaucracy and an exposed school's need to respond to immediate financial concerns requires schools to have adequate liquid funds at hand to weather day to day expenses.

Not only are public funds less mobile for schools, but the process by which the budget is approved also makes assumptions about timespace: Section 38 of the South African Schools Act states:

... (2) Before a budget... is approved by the governing body, it must be presented to a general meeting of parents convened on **at least 30 days' notice**, for consideration and approval **by a majority of parents present** and voting.

(SASA, S38.2, my emphasis)

This particular clause is underpinned by tacit timespace assumptions about the parent body of the school. It assumes that (a) spatially, parents are able to access the school, and (b) parents are able to afford the time to participate in schooling practices (the former compounding the latter). Both of these assumptions are problematic. In the case of commuter schools such as School B, a common complaint from staff is that parents struggle to get to the school premises. Drawing on Schwartz's observation that poverty manifests as temporal domination, the expectation that remote parents participate in quorum meetings for school governance activities (such as budget voting) begins to seem unrealistic.

In addition to timespace assumptions about the fluidity of money, and parents, section 39(2) of the same Act also makes assumptions about time horizons for planning. It states that the budgeting process each year should "reflect the estimated cumulative effect of non-payment of school fees;" (SASA, S. 39(2)(c)(i)). Such an expectation implicitly expects regularity since accurate forecasting requires stability, even if it is dynamic (i.e. fluctuations are regular and predictable).

Recompense for unpaid fees also creates friction in timespace. Schools must gather and collate extensive evidence dossiers for each exempt student and submit these to the provincial education department each year, for recompense that is paid 18 months after when the fees were due. This delay in recompense again assumes a liquidity on the part of the school underpinned by the expectation that the majority of students are *not* exempt and hence the school has access to private liquid capital in the interim.

Arrhythmia: timespace-conceived vs. timespace-lived

The ideals set out in the funding policies about the timing of information regarding finances do not match the realities of everyday policy enactment (more evidence for this is presented in Chapter Seven). Sections 117 and 118 of the NNSSF (2006) state that:

117. The effective implementation and monitoring of the school allocation **requires timely provision of accurate information** by the DoE, PEDS and schools.

...

118. The DoE must provide the Minister with sufficient data and research to enable the Minister to publish, in the Government Gazette, school allocation information... for the next three years, **by 1 August each year.**

(NNSSF, S.117-118, my emphasis)

This ideal timespace-conceived is in keeping with the NNSSF's bureaucratic framing of planning horizons and procedures.

However, even on its own terms, the NNSSF's own rhythms do not match its stated ideals: since the promulgation of the NNSSF in 2006, the *actual* dates of publication for school monetary allocations have progressively moved later and later in the school year. Each year, the set figure for *that* year and the forecast figures for the following *two years* are published in the government gazette. The table below shows the dates of publication for the information that provinces and schools required to assemble their budgets for the (following) financial year:

Years for which information was published	Date of gazette publication
2008, 2009, 2010	26 September 2007
2009, 2010, 2011	17 October 2008
2010, 2011, 2012	3 December 2009
2011, 2012, 2013	5 November 2010
2012, 2013, 2014	2 December 2011
2013, 2014, 2015	8 March 2013
2014, 2015, 2016	17 January 2014
2015, 2016, 2017	16 January 2015
2016, 2017, 2018	10 June 2016
2017, 2018, 2019	28 April 2017
2018, 2019, 2020	2 February 2018
2019, 2020, 2021	6 May 2019

Table 6.4 Dates of publication of amended NNSSF data, 2007–2019.

Table 6.4 indicates that the release of critical budgeting information for both provinces and schools has become later and later, and also erratic. Far from being published by 1st August of the preceding year as stated in the NNSSF, provinces and schools at times wait until May for confirmation that the previous years' forecasts are accurate for the budget currently under construction. The ideal time horizons for school planning and budgeting are difficult to adhere to when critical information is unavailable for planning purposes.

Moreover, the effects of such delays are contextually differentiated along exposed/fortified lines: schools that have access to large supplements of privately sourced funds will largely be unaffected by these variations, as they are far less dependent on this income stream. But schools that depend upon this information—i.e. no-fee schools and schools who struggle to collect fees—will experience this arrhythmia on the part of the national department keenly.

6.2.1.3 WCED circulars 0041/2016 and 0005/2018

Two circulars from the provincial education department, the WCED, affected the schools in this study regarding the NNSSF during the research period. The first, WCED Circular 0041/2016, stipulated how student funding allocations were to be distributed for the year in question, and the second, WCED Circular 0005/2018, outlined how fee exemption compensation claims were to be processed by the WCED for the same year. Both provide further detail and structure to Western Cape schools' access to capital in timespace, with deadlines and dates spelled out in detail.

Allocation payments (WCED Circular 0041/2016)

The cycle of funds disbursement from the province does not coincide with that of the calendar or academic year. NNSSF student allocations are transferred to schools in two payments: the first (60%) comes in April/May and the second (the balance of 40%) in November, which must see the school through to the following April/May. The first instalment is to be used for purchasing materials for the *following* academic year—hence a circular in year x , about a payment in year $x + 1$ (using funds based on student allocations for year $x + 1$) to buy materials for year $x + 2$. Funds unclaimed by February of year $x + 1$ (using student enrolment data) are forfeit.

An example: the WCED notifies schools in March of 2016 that they will receive 60% of their money in April/May of 2017 (based on their student enrolment in February of 2017) which must be used (in addition to covering daily costs such as maintenance, electricity and water) to buy any extra required textbooks, pens and notebooks for January 2018.

Beyond framing the timelines of payments and process, the circular details what funds are to be used (and not used) for, and reiterates the SASA (1996, S. 36.1) which encourages schools to seek supplementary funding by what means are available to them.

Compensation for school fee exemptions (WCED Circular 0005/2018)

Early each year, the WCED releases a standard circular detailing how Q4 and Q5 schools should apply for compensation for those students who were exempt from paying fees. While the content doesn't deviate from the national regulations in the main, the notable detail at the provincial level is the timing of the payment. Fees lost in year x , are applied for by the school by the end of May in year $x + 1$, and then audited and validated by the province in June and August. An announcement regarding the compensation to be awarded is made by the WCED at the end of September once all applications have been processed

in light of the budget available for compensation. Funds are then transferred in the November. This process was identical for circulars issued in 2016, 2017, 2018 and 2019.

Again, an illustrative example: fees not paid in 2018 are claimed for in May of 2019, and only approved for compensation in November 2019, **if** the provincial budget allows.

Thus, in addition to the onerous documentation to be completed for each partially or totally exempt child by the school (including: proof of grants or orphan status if applicable; financial statements and affidavits of caregivers; and application forms and enrolment data) the *actual* funds received in recompense for lost fees are in effect only available 18 calendar months after the fees would have been paid. This process makes little allowance for any significant shifts or variations in fee fealty or the socio-economic status of the students enrolled from one year to the next: a school without significant liquid savings to weather the variations will find itself exposed to cash flow issues.

The provincial circulars indicate a financial time horizon of planning and administration that stretches both 18 to 24 months into the past (exemption compensation) as well as 18 to 24 months into the future (planning allocations). This bureaucratic, monochronic approach to time and economic capital liquidity makes assumptions about stability across a relatively long period of time, as well as the reliability of supplementary capital for schools to weather any unforeseen expenses and other vicissitudes. Budgetary processes in general tend to be framed in monochronic and linear terms; rather, the issue is the bureaucratic rigidity of access to economic capital, and how it bites when pressed up against shoestring budgets with no flexibility.

The next section details how each school in this study strategized around the policies thus far presented. The gaps that arise between the ideals expressed in policy and the schools' contextual realities relate to the differentiated access to capitals described in the previous chapter.

6.2.2 School take up of the NNSF

School A and School B, both being Q5 schools, are subject to the same provisions under the NNSF. The significant differences in the economic capital available to them resides in their students' ability—and willingness—to pay relatively high fees.

Both schools sought to subsidize fees with other forms of income, although to varying degrees. School A did very little fund raising and next to no rentals, but did draw heavily on past students in an active alumni network who cross-subsidized the fees of less wealthy

students exempt from paying directly (refer to Chapter Five—"School A: Forms of Capital" → "With what"). School A had a far lower percentage of fee exempt students. It also charged double the fees of School B, and was far more successful at collecting these. The principal at School A described a congenial form of negotiation with cash-strapped parents, where the school encouraged at least partial payment where possible. To recap from Chapter Five: between supportive alumni (social capital) and willing parents, School A gathered 90% of its fee income in the year in question.

School B was far more dependent on rental income, primarily from a fixed arrangement with an adjacent office complex for renting parking space. School B commanded far less fee fealty than School A, and gathered about 65% of its total fees in a good year (refer to Chapter Five—"School B: Forms of Capital" > "With what"). Fee fealty dropped towards the end of each year, and towards the end of students' schooling careers as they approached Grade 12. School B had to resort to other forms of soft power to encourage students to pay what they could.

As outlined in the policy, the work of collection fell to schools. Both schools described a significant amount of effort that went into gathering and chasing fees, including the use of formal debt collectors. Exemption calculations, debt collection and reimbursement applications presented more work for School B who served a poorer student base, and also had fewer staff. Both schools also described how the school fee exemption policy was outdated and becoming increasingly problematic, as relatively high earning parents could still apply for partial or full exemption (despite being able to afford the fees—see Table 6.3 and Appendix F).

It was mentioned in Chapter Five that School B expressed an interest in being moved down into a lower quintile. Examining the policies shows that this would not (at this point) prove an effective strategy for alleviating the school's financial distress. Schools in the lower quintiles—especially those forbidden from charging fees—are *more* exposed than School B in terms of their access to capital, especially economic capital.

6.2.2.1 Finding the tipping point between fortified and exposed field positions

As will be explored in the next chapter, the timetables each school could construct with the capitals they had available to them produced different rhythms of teaching and learning. The divergence between both the rhythms of each school, and also the results produced by said rhythms, suggests the existence of a watershed between fortification

and exposedness somewhere between the field positions of School A and School B when framed in terms of access to capitals.

Further evidence for such a watershed can be found in the Annual Schools Survey dataset from the national Department of Basic Education, which doesn't describe fees collected, but does offer the ratio of enrolled students to the number of teachers (including school-employed teachers) at each school, along with the schools' quintiles. As a trend, the schools that produce consistently high national senior certificate results have lower student-teacher ratios than those that don't, and student-teacher ratios that are lower than the public teacher allocation are found amongst schools that can collect fees.

As illustrated in Chapter Five, access to economic capital directly influenced the other forms of capital each school could command, particularly in the form of extra staff and extra school space. The next section describes the Post Provisioning Norms (PPN), outlined in the Personnel Administrative Measures (PAM), to investigate how staff are distributed to schools and explore how supplementary private income is used to inflate staff numbers.

6.3 Who: teachers and other staff

The single largest difference in the two timetables detailed in the previous chapter was the number of teaching (and non-teaching) staff available at each school. While the schools had similar numbers of publicly funded teaching staff, the additional help hired with privately sourced economic capital was vastly different. For reference, the who segment of Table 5.3 is listed here again:

Strand	Timetable input	School A	School B
Who	Full time teaching staff (state)	26	28
	Full time teaching staff (SGB)	32	12
	Part time teaching staff (SGB)	0 (2) ⁵⁰	4
	Non-teaching staff	35	12

Table 6.5 Differences in staffing at School A and School B (from Table 5.3).

This section explores the policy origins of these similarities and differences by examining relevant sections of the Personnel Administration Measures (the PAM), in particular the Post Provisioning Norms (PPN). WCED Circulars 0028/2017 and 0031/2009 are also described to situate these policies enactment at the level of the province.

6.3.1 The PAM and the PPN

The PAM contains the PPN as well as descriptions of teachers' core responsibilities and how they are to use their time at school. Publicly funded 'educator posts' (the policy's phrase for teacher jobs) are established for each school by the province in accordance with regulations promulgated by the national Department of Basic Education. The following sections analyse these policies in terms of how they distribute (or constrain) forms of capital for schools, as well as how they influence school timespace.

6.3.1.1 Forms of capital

The provision of publicly funded staff to schools is the largest component of total public expenditure on basic education (80%[<]). Schools are not given cash to hire staff directly: rather, teachers are employed by the provincial department and deployed to schools based on the province's job distribution (post provisioning) calculations.

Staff in South African schools are graded according to post levels. Post level 1 (P1) is for a normal school teacher; post level 2 (P2) refers to a Head of Department (HoD) who will have some managerial responsibilities, and a slightly reduced lesson load to allow for these; post level 3 (P3) refers to deputy principals, and post level 4 (P4) refers to the principal of a school. Salary bands increase with each post level.

The following table outlines the **ratios** of posts within a school, and their relative lesson-load, based on the norms and standards outlined in the PAM.

Post level	% total teachers at this level	Ideal ratio in whole numbers ⁵⁰ (based on 1 principal)	Ideal lesson load for this post level in high schools ⁵¹
1	69.72%	21	85% - 92%
2	18.22%	5	85%
3	8.45%	2	60%
4	3.42%	1	5% - 60%

Table 6.6 Teacher ratios and relative lesson loads according to the PAM.

The ratios in Table 6.6 will vary depending on student intake, since each school only ever requires one principal, irrespective of the school size.

The exact number of teachers required to cover the curriculum is calculated using the formulae in the post distribution model in Annexure A1 of the PAM. This calculation depends on:

- the number of students
- the maximum ideal class size applicable to a learning area or phase
- the ideal lesson load of teachers
- the need to promote a learning area
- the number of grades in a school
- the number of languages of instruction at the school
- student disabilities
- access to the curriculum (i.e. classes that need to be smaller due to the nature of the subject)
- poverty
- and 'ad hoc factors' (PAM, A1).

For high schools, the Senior Phase grades (i.e. Grades 8 and 9) are worked into the formula with an **ideal class size of 37** and an **ideal teacher workload of 87%**.

Calculations for the FET Phase (i.e. Grades 10, 11 and 12) become more complex, depending on the elective subjects the school offers and the number of students taking each elective. Table 6.7 below reproduces the relevant aspects of the PPN for FET subjects.

Subject	Ideal class size	Lesson load	Contact hours per week
Mandatory subjects			
Home and first additional languages	37	84	4.5
Mathematics or maths literacy	35	84	4.5
Life Orientation	37	84	2
Elective subjects			
Agricultural Management practices	15	84	4
Agricultural Tech.	15	84	4
Agricultural Science	37	84	4
Dance Studies	15	84	4
Design	12	84	4
Dramatic Arts	12	84	4
Music	6	84	4
Visual Arts	12	84	4
Civil Technology	15	84	4
Electrical Technology	20	84	4
Mechanical Technology	15	84	4
Engineering Graphics and Design	15	84	4
Computer Applications Technology	25	84	4
Information Technology	25	84	4
Life Sciences	32	84	4
Physical Sciences	30	84	4
Consumer Studies	25	84	4
Hospitality Studies	20	84	4
All other electives	37	84	4

Table 6.7 Ideal class sizes, teacher lesson loads & contact hours for FET subjects⁵⁰.

Table 6.7 illustrates that there exists, ironically, a somewhat perverse incentive for cash-strapped schools to offer subjects for which the PPN makes allowance for smaller classes, as this will boost their publicly allocated teacher quota. However, those subjects with lower class sizes are lower in cultural capital value when compared to STEM subjects and languages.

Poverty redress: sending more teachers to poorer schools

The PPN sets aside 5% of total posts in a province for poverty redress, stipulating that these posts are ringfenced to bolster teacher numbers in schools that serve the poor. Of these 5% 'poverty posts', 80% are for no-fee schools (i.e. 4% of the total post allocation

⁵⁰ The existing formula has some dummy variables to allow future adjustment of post-provisioning, based on differential funding for each grade, and promoting particular subjects. These are, however, set to null values in the current instantiation of the PPN, and are left out of this table for clarity.

for the province) and 20% are for fee-charging (Q4 and Q5) schools (i.e. 1% of total provincial posts).

However, this distribution is still at the behest of the provincial education department, and 4% of total posts distributed across 60% of public schools is minute in comparison to the additional staff fees can buy. As was the case with non-personnel costs, the redress spending by the state cannot compete with the volume of economic capital schools might access by private supplementation.

Non-teaching staff

The PAM makes no mention of the provision to schools of staff for duties other than teaching and management. However, the NNSSF acknowledges that the distribution of *non-teaching* staff is not in favour of poor schools:

29. The allocation of non-teaching staff to schools, including administrative and support staff, is extremely uneven. The provision of such personnel has been severely lacking in historically disadvantaged and small schools. **Inequalities in the provision of such staff members is almost certainly associated with major inefficiencies in schools which serve poor communities.**

(NNSSF, my emphasis)

That is: the distribution of teaching staff—as stipulated in the PPN—does not take into account the additional administrative load for teachers in poor schools where non-teaching staff are not present to carry this burden. Teachers working in no-fee schools or those struggling to collect fees are saddled with a different work profile. The next section looks at how the PAM envisages the ideal work day of a teacher, their responsibilities and duties, and how this might materialise practically.

6.3.1.2 Timespace-conceived

Two sections of the PAM speak to the timespace-conceived regarding teachers in public schools: the first—section A.4: Workload of School-based Educators—describes the hourly expectations from P1 publicly employed teachers; and the second—Annexure A2—describes the responsibilities of ordinary P1 teachers. P1 teachers carry the majority of the timetable's lesson load.

Workload of school-based educators

The work expected of all P1 teachers in public ordinary schools is divided into responsibilities within and outside of the 'formal school day', defined as a minimum of seven hours per week day, or 35 hours at school each week. These responsibilities include:

- Scheduled (i.e. timetabled) teaching time
- **Relief (substitute) teaching**
- Extra and co-curricular activities *
- Pastoral duties (grounds patrol, detention duties etc.)
- Administration
- Supervisory and management functions
- Professional duties (conferences, meetings, workshops etc.) *
- Planning, preparation and evaluation of learning *
- Professional development *

...where those activities designated with an asterisk may also fall outside of the formal school day. Overall, teachers are expected to work 1 800 hours a school year, which is 45 hours a week when divided across 40 weeks of schooling per annual cycle (i.e. seven hours a day Monday to Friday at school, and an additional ten hours per week spread over the week or holidays).

These nominal rhythms and routines intersect with lesson load and curriculum spread to produce a particular conception of a normal teacher's everyday activities. In particular, the contextual relationship between the hours stipulated in section A.4 of the PAM and the PPN are of interest to this study.

A Teacher Time-Use Calculator was designed based on the ratios described in the PPN and its ideal lesson loads. This Time-Use Calculator used automated formulae in an Excel spreadsheet to explore scenarios of how these forms of capital and idealised uses of timespace interacted. Table 6.8 and Table 6.9 below illustrate two such scenarios.

(Each scenario is based on a school of 1000 students, with lessons of an hour each for simplification purposes. **All numbers are in hours** unless stated otherwise. The scenarios reflect a working week for a teacher.)

In the first scenario, the school week is capped at the recommended 45 hours as suggested in the PAM (section A.4). The spreadsheet then calculated the number of teachers available for teaching using the post level distribution ratios, the lesson load suggested in the PAM, and incorporating the duties described above.

Scenario A		Total work hours	45
<i>Responsibilities</i>			
Free periods	3	Meetings	2
Total teaching time	24.5	Break duties	2
Extra-curricular duties	1	Detention duties	0.5
<i>Time break down⁵¹</i>			
Time at school for phone calls, photocopying, food or toilet breaks	5	Class size	40
Planning time	4 hours	Marking time	6 hours
Planning time / class period	10 minutes	Marking time / class period	15 minutes
Attention per student in each class period	89 seconds		
Thought per student for each lesson plan	14.5 seconds		
Assessment for each student per lesson	21.8 seconds		

Table 6.8 Teacher's weekly time distribution based on the PPN and PAM

Note that Scenario A makes no allowance for:

- meeting parents
- commuting time
- extra classes to help struggling students
- departmental meetings
- professional development workshops
- pastoral work or referrals to specialist intervention programmes
- SGB meetings (if required)
- fundraising events
- weekend sporting events
- or administration such as report writing and filing.

It also assumes all infrastructure is functional and available when required.

In the second scenario, the school week is extended to 60 hours a week, but the cap on teacher provision is retained as that described in the PPN. The number of free periods is kept at three periods a week, and the duties distribution is the same as scenario A.

Scenario B (600 hrs overtime p.a.)		Total work hours	60
<i>Responsibilities</i>			
Free periods	3	Meetings	2
Total teaching time	24.5	Break duties	2
Extra-curricular duties	1	Detention duties	0.5
<i>Time break down</i>			
Time at school for phone calls, photocopying, food or toilet breaks	5	Class size	40
Planning time	10 hours	Marking time	15 hours
Planning time / class period	24 minutes	Marking time / class period	37 minutes
Attention per student in each class period	89 seconds		
Thought per student for each lesson plan	36.39 seconds		
Assessment for each student per lesson	54.59 seconds		

Table 6.9 Teacher's weekly time distribution with 25% overtime.

Scenario B suggests that significant thought about students' needs (planning) and assessment of students' work for each lesson will require considerable overtime outside of the formal 35-hour school week. The baseline timespace-conceived of schooling envisaged in the PAM seems insufficient when considering the large classes created by public post provisioning. This does not yet take into account any backlogs in learning students might experience, or whether students are socialised into schooling rhythms and habits (i.e. bring the appropriate schooling habitus).

Two more scenarios will be considered when interactions between the who and the with what are explored. This will investigate how introducing SGB-paid staff changes the timespace-conceived of the average P1 classroom teacher. All the calculations provided in the above scenarios are premised on the national policy documents.

The actual distribution of the posts declared by the Minister for Basic Education is, however, under the remit of the provincial department (in this study, the WCED). Provincial interpretations of the post provisioning are now explored, along with how these relate to the national ideals.

6.3.1.3 WCED Circulars 0028/2017 and 0031/2009

Two provincial level circulars give insight into how the WCED enact post provisioning across the province. Schools must keep their enrolment data up-to-date on a central database (CEMIS) which provincial authorities use to calculate and publish post distribution in August of the previous year. Schools that intend to expand, by enrolling more students than they currently have, can apply for extra posts during this period to cater for the anticipated influx, although these posts can be removed should the data provided be found to be inaccurate or out of date. Schools with falling enrolment can have members of staff declared 'in excess': the province then attempts to redistribute the extra teacher to another appropriate school in a similar area where there is a vacancy. However, this brittle bureaucracy of distributing teachers amongst schools is unable to keep up with the fluidity of students between schools (see "Whom").

The most glaring aspect of the circulars on post provisioning is how little decision-making vests with the schools about their publicly funded teachers. Schools can apply, appeal and petition, but the final decision rests with the province who are the employer for these posts.

WCED Circular 0031/2009 (referred to by Circular 0028/2017) illustrates some of the finer detail involved in post distribution within provinces. In addition to describing the main post allocation for schools, it also details ad hoc posts provided for specialist curriculum e.g. dance, IT and Dinaledi posts. It also emphatically reminds schools that timetable balancing is not an appropriate use of extra posts, and that extra posts allocated for specialist curriculum areas do not count when calculating the number of managerial posts a school is deemed to require. The circular also outlines that reducing teacher-student ratios is a priority (aiming for 1:33 in high schools and 1:37 in primary schools) and that this is the lodestar for deciding on post distribution issues.

Although schools have little decision-making authority over publicly funded staff, they are *the* authority regarding SGB-paid staff. The next section outlines this intersection between staffing and access to private supplementary economic capital.

6.3.2 Who tangles with with what: SGB staff

The absence of any reference to SGB (i.e. school employed) staff is a significant silence in the PAM and the PPN. None of the formulae take into account what extra staff a school can hire from privately sourced funds. There is only one brief mention in the NNSSF regarding the use of privately accessed funds, namely that extra staff are not to be hired

until outstanding balances on non-personnel expenses such as utilities and LTSM are settled. Bar this, schools with extra economic capital are free to hire as many extra staff as they can afford, *without any repercussions for their quota of publicly funded staff*.

Table 6.5 suggests that schools often use this licence extensively. Drawing on the two previous scenarios of a teacher's weekly time use, two more scenarios are now offered. The first (Scenario C) uses the same work week (45 hours) as Scenario A, but with an increase in the number of P1 staff at the school by 25%.

Scenario C		Total work hours	45
<i>Responsibilities</i>			
Free periods	3	Meetings	2
Total teaching time	24.5	Break duties	2
Extra-curricular duties	1	Detention duties	0.5
<i>Time break down</i>			
Time at school for phone calls, photocopying, food or toilet breaks	5	Class size	34
Planning time	4	Marking time	6
Planning time / class period	10 minutes	Marking time / class period	15 minutes
Attention per student in each class period	107.1 seconds		
Thought per student for each lesson plan	17.48 seconds		
Assessment for each student per lesson	26.22 seconds		

Table 6.10 Teacher's weekly time distribution with 25% increase in P1 staff.

Table 6.10 shows that the attention each student gets per lesson has increased significantly. And while the amount of time available for assessment is the same, the number of students to assess per class has decreased by 15%.

Scenario D below now increases the P1 level staff by 50% compared to state provisions, and decreases the teacher's lesson load with two more frees per week:

Scenario D		Total work hours / week	45
<i>Responsibilities</i>			
Free periods	5	Meetings	2
Total teaching time	22.5	Break duties	2
Extra-curricular duties	1	Detention duties	0.5
<i>Time break down</i>			
Time at school for phone calls, photocopying, food or toilet breaks / week	7	Class size	31
Planning time	4	Marking time	6
Planning time / class period	11 minutes	Marking time / class period	16 minutes
Attention per student in each class period	114.5 seconds		
Thought per student for each lesson plan	20.35 seconds		
Assessment for each student per lesson	30.53 seconds		

Table 6.11 Teacher's weekly time distribution with 50% increase in P1 staff.

Adding extra staff affects most of the key aspects of a teacher's weekly work profile: smaller classes, fewer classes, more time for each student, less assessment load, a free period a day, more time to plan and prepare each lesson, and within a 45 hour work week.

6.3.3 Schools' take up of the PAM and the PPN

As with the NNSF, the number of teachers at each school in this study can now be framed in policy terms, connecting forms of capital used in the timetable to policy texts.

School A and School B themselves have very little influence on the number of staff they are allocated by the province. Although schools can apply for extra posts, or appeal lost posts, these decisions are still made at the discretion of the PED.

Table 6.5 details that School A had 26 publicly funded teachers, and School B had 28. Dividing the enrolment numbers at each school by this number means that

- School A had 910 students : 26 public posts → 1 teacher for every 35 students
- School B had 1018 students : 28 public posts → 1 teacher for every 36,35 students

These numbers include the principal and deputies: that is, with only state provided staff, every teacher (including principal and deputies) would be teaching every lesson every day to a class of 35-37 students with no frees (i.e. no elasticity).

Classes would need to be increased in size to allow for free periods or the lighter lesson loads allocated to senior management. Offering smaller classes would make others larger. If the ideals described in Table 6.6 were adhered to, classes would begin to reach sizes of 43 to 45 students across all grades and all subjects.

How similar would the ratios be in schools that cannot afford to hire extra teachers? It is not possible to reconstruct the exact weighted-student calculations used by the province to decide on each school's allocation without access to their detailed CEMIS database (which specifies enrolments and subject choices across every school in the province). But post provision across the province has been increasing year on year since 2011 (WCED Annual Report 2017/2018: Western Cape Education Department (2018b)), with 32 594 public educators deployed in the year of this study.

In that same year, the province had a total of 1 505 schools serving 1 021 492 students. If 5% of these posts were set aside for redress appointments, this would amount to 1 629 teachers for redress purposes that year, or in practical terms, 1 or 2 extra teachers for no-fee schools or schools with high proportions of fee exempt students. Redress posts excluded (since as Q5 schools, neither School A or School B would qualify), 30 964 teachers to teach 1 021 492 students is a ratio of 1 teacher for every 33 students, without adjusting for principals or deputies. Based on these numbers, the public allocation of teachers to School A and School B were not far off the average in the province.

Both schools, however, hired significant numbers of SGB staff (see Table 6.5), and both paid their SGB teachers on pay parity with provincially employed staff. What elasticities do exist in the timetables in each school are a direct consequence of this supplementary staffing, given the constraints on what is provided from public sources.

Schools, then, have strong incentives and pressures to keep up their fee intake as far as they possibly can, since it is these fees that buy them room to breathe in their timetables. This has direct consequences for who schools enrol. The next section details the Admissions Policy for Ordinary Public Schools under the thread whom to examine what allowances are made in policy for schools to select students.

6.4 Whom: student admissions

The previous two sections have outlined how policies on funding (with what) and post distribution (who) affect the forms of capital available to schools. What has arisen as a recurrent theme is the importance of access to private supplementary capital, raised through rental, donations or fees. Of these three income streams, fees are the only income stream enforceable through policy.

Relying on fees to supplement public funds entails schools attracting an applicant pool which can pay fees. This next section examines the policy around admissions, namely the Admissions Policy for Ordinary Public Schools (APOPS), and details how it avails or constrains forms of capital for schools, as well as shapes schools' timespace.

6.4.1 The APOPS

Chapter One explored how schooling was segregated based on race by the apartheid government. With the arrival of democracy, free choice regarding which schools students could attend was seen as the only response to the racial school balkanisation of the previous regime. The schooling terrain of South Africa was 'marketized' (Ball 2003; Soudien, Jacklin and Hoadley, 2001) with the free flow of students to whichever schools they chose, subject to obtaining a place.

School governing bodies decide on their school's admission policy, which must be sent to the provincial department for ratification. This school-specific policy must also be compliant with the APOPS, the Constitution (Republic of South Africa, 1996) as well as any provincial legislation regarding school admissions. Placement of students at public schools in the province is ultimately the responsibility of the head of the provincial department, who has the authority to instruct a school to enrol a student.

6.4.1.1 Forms of capital

What is most notable about the APOPS is how it *forbids* explicit discrimination based on race, gender, religion, language or means in ordinary public schools. The last two criteria⁵¹ weigh heavily, as they directly affect staffing (who), rooming (where), and curriculum provision (what). Regarding fee payment, the APOPS states:

9. The admission policy of a public school and the administration of admissions by an education department must not unfairly discriminate in any way against an applicant for admission.

10. A learner is admitted to the total school programme and may not be suspended from classes, denied access to cultural, sporting or social activities of the school, denied a school report or transfer certificates, or otherwise victimised on the grounds that his or her parent—

(a) is unable to pay or has not paid the required school fees;

(APOPS, S.10(a))

If schools are to draw forms of capital towards themselves through the students they admit, this must be done in a plausible manner so as to withstand any accusations of bias or discrimination. Selection criteria may also not overtly include prior academic performance or academic testing unless the school is a specialist school for STEM, or the Arts (APOPS, S.11).

The APOPS, then, shapes the forms of capital schools have access to in two ways: firstly, by removing demographics as *explicit* proxies for 'easy to teach, fee paying students', and secondly by otherwise deregulating enrolment and opening the schooling market for maximum student mobility.

In such competitive conditions, schools with existing stores of capital (in various forms) can use this to reproduce, if not grow, this base, while schools with poorer field positions and low capital resources will struggle to compete on equal terms. How this is practically achieved is explored in more detail later when schools' enactment of the APOPS is examined.

⁵¹ The continued (loose) alignment of race, means and language in post-apartheid South Africa has led to significant conflicts about how schools process applications, often claiming one criterion is being used as a proxy for the other. See for example Hōerskool Overvaal vs. Gauteng Department of Education.

6.4.1.2 Timespace-conceived

The APOPS also gives tacit advantage to already fortified schools through its ideal conception of timespace, both in how students apply and are enrolled at schools, and the rate at which they move through the schooling system.

Application deadlines

Applications for places at public ordinary schools are to be submitted to the school “in a timely and efficient manner”:

5. The Head of Department must determine a process of registration for admission to public schools in order to enable the admission of learners to take place in a timely and an efficient manner.

(APOPS, S.5)

The APOPS states the onus lies with the school to avail the correct documentation, advice and support to any parent who wishes to apply. This responsibility could possibly construe a form of work intensification for exposed schools attracting applicants who struggle with bureaucratic procedures and literacy⁵².

Longer planning horizons give default advantages to more socially and economically privileged families. Households whose work and living arrangements are stable are able to plan far in advance, whereas households with precarious, seasonal or temporary work (or lack of work) may find such planning fruitless given the number of unsettled variables.

Low socio-economic status is closely associated with shorter planning horizons (Fieulaine & Apostolidis, 2015). Table 6.12 below details the opening and closing dates of applications for the various provinces (data is for more recent years as the year of study data is unavailable—source: provincial education department websites):

⁵² In Bourdieusian terms, ‘symbolic violence’.

Province	Applying for enrolment in	Opening date	Closing date
Eastern Cape	2020	1 August 2019	31 October 2019
Free State	2020	2 April 2019	31 July 2019
Gauteng	2020	13 May 2019	15 July 2019
KwaZulu Natal	2020	2 April 2019	20 September 2019
Limpopo	2019	18 April 2018	31 May 2018
Mpumalanga	2019	2 May 2018	31 July 2018
Northern Cape	2020	13 May 2019	7 June 2019
North West	2019	18 June 2018	29 September 2018
Western Cape	2020	15 February 2019	15 March 2019

Table 6.12 Variations in application windows by province.

The variation in dates in Table 6.12 do not correspond neatly with the relative wealth or poverty of South Africa's provinces. What does stand out, however, are the deadlines for the province where this study was conducted—the Western Cape.

Several factors potentially contribute to the Western Cape having the **earliest** and **shortest** application window, including: its relative wealth (and hence ability to plan with long horizons); an incumbent provincial government which is pro free-market and prioritizes equality over redress, and; the provincial governments' publicly expressed desire to stem the flow of urbanization into the Western Cape from poorer, more rural provinces such as the Eastern Cape. Whatever the motivations, the Western Cape's short early admissions window benefits wealthier families in the school applications process.

Given that schools often offer acceptances prior to the closing date for applications, earlier application *within* the application window also confers advantage. Fortified schools that attract more applications than they can accept from an advantaged applicant pool are most likely able to accept applications from that student base earlier, thereby bedding down the symbiotic relationship between advantaged schools and advantaged families. The first-come-first-served approach equalizes timespace for all applicants in the marketized school terrain, and such equal treatment gives tacit sanction to existing inequalities (Bourdieu, 1974).

Age requirements and repetition

The APOPS states that schools need to keep students with their age cohort as far as is feasible. Students in South African public ordinary schools are allowed to repeat one academic year for every three years of schooling in the first ten years (Grades R-9). That is: a student coming to high schools could be as much as three years older than the ideal

age for that grade. Schools admitting students older than the ideal age are instructed to create accelerated programmes for such students so that they can 'catch up':

27. If a learner has been admitted to a public school at an age above the age norm for a grade, such a learner must, as far as possible, be placed in a fast track facility, or with his or her peer group, unless it is not in the educational interest of the learner. In the latter case the learner must be placed in a suitable lower grade, and an accelerated programme must be worked out for the learner to enable him or her to catch up with the peer group as soon as possible.

(APOPS, S.27)

Over-age applicants, then, present real forms of work intensification for schools, whether by accelerated programmes such as those envisaged in the policy, or through increased differentiation in classes to a broader range of students (see Schollar (2018)). In either case, the ideal timespace assumed in the policy is one where students learn the same material at the same pace in all contexts and circumstances, with deviance from this norm an exception to be remedied.

Such a monochronic ideal of learning is both conceptually and empirically questionable. The following table based on Hall (2018) describes the age for students who have completed Grade 9 across the nine South African provinces:

Province	EC	FS	GT	KZN	LP	MP	NW	NC	WC	SA
%	55.7	63.8	80.4	71.5	69.4	64.8	54.2	62.8	74.2	69.2

Table 6.13 Percent of students who have passed Grade 9 by the time they reach the calendar year in which they turn 17.

As Hall notes, the age range used is generous: students should complete Grade 9, according to the policy documents, in the year they turn 15. Fewer than 70% of students across the country are *within 2 years* of the ideal age range for Grade 9 (the exit point of the mandatory GET phase of schooling). The ideal pace of learning, and throughput of schooling as outlined in the APOPS, does not bear out in the vast majority of schools. In the province where this study was conducted, less than three quarters of Grade 9 students are between 14 and 17 years of age, with the balance being older.

Schools that command more applications than they can accept have the field position to screen out older applicants. Age acts as a subtle filter that eliminates those who have had academically challenging pathways through school: repetition or missed years are indicative of poverty, academic struggles or illness. Having students significantly older than the intended ideal age could be considered an indicator of exposedness.

6.4.1.3 WCED Circular 0040/2016

Windows of application for ordinary public schools are set at the provincial level. Applications for the year 2018 were open from the 6th of February until the 24th of March 2017⁵³. Several schools visited in the year of study displayed multilingual posters issued by the WCED which detailed this application window, and the required documentation to be submitted to the school⁵⁴.

The circular also details that schools are to forecast their next year's enrolment in the previous January (see "Who" for the importance of this for post provisioning). This message is a contradiction with other utterances from the WCED regarding significant inflow of students into the province annually due to urbanisation, as emphasized by the Head of Department at a 2017 meeting of the Provincial Teacher Education Development Committee. At that meeting, the provincial projection was an increase of 12 000 students per annum seeking placement in the province's schools.

The WCED makes use of an online system, the Schools Admissions Management Information (SAMI) system, through which schools predict, log and sign off on future enrolments. The following deadlines are listed in WCED Circular 0040/2016 for 2018 enrolments:

Activity	Date
Schools capture planned enrolment on SAMI	30 January 2017
School admissions open (all ordinary public schools)	6 February 2017
School admissions close (all ordinary public schools)	24 March 2017
Schools indicate outcome of applications on SAMI	28 April 2017
Parents are informed of outcome by letter	3 May 2017
Parents confirm acceptance	30 June 2017
Schools fill available places	3 rd term 2017

Table 6.14 Deadlines for enrolling students for 2018 in the Western Cape.

Table 6.14 indicates that the province is aware of unplaced students and vacant places in schools as early as May of the previous year, providing the Head of Department with eight and a half months to place students who still require a school as is their duty according to the SASA.

⁵³ In the period from 2017 to 2019, this application window has been reduced from 6 weeks to 4 weeks.

⁵⁴ The WCED's publication of important bureaucratic information in all three languages of the Western Cape is laudable but naïve: most speakers of isiXhosa, spoken predominantly by the Black subpopulation of the province, are unable to read or write the official orthography of that language.

Non-compliance on the part of schools with these dates poses the risk of losing control over their admissions procedures, as the head of the provincial department may then place students with the school without the school's input. The system again gives tacit sanction to existing inequalities: fortified schools commanding excess applications from households with stable planning horizons will be full and not risk yielding their enrolment autonomy. Exposed schools that command less applicants, or applicants from a section of the population that may apply late due to socio-economic precarity, are vulnerable to losing their decision-making authority regarding who enrolls. Schools are in direct competition with each other to fill up as soon as possible to avoid being instructed to accept the most precarious—or marginalised—students.

Applying for a school place online

The Western Cape, as a province, finds itself in a position where demand for school places is rising and the process of placing all students is becoming increasingly challenging (WCED Circular 0040/2017). In 2019, the province sought to trial an electronic placement system whereby parents can apply online. However, once again this will advantage connected and computer literate families to secure coveted places earlier, whilst structurally excluding poor or marginalized families from the competition for prestigious school places. The province's challenges in placing students within inadequate school provisioning withstanding, such systems further exacerbate inequality between fortified and exposed schools in the system, as well as advantaged and disadvantaged students.

6.4.2 Whom influences with what: fee exemptions

These inequalities in application and enrolment not only affect the cultural capital schools can access through their student intake, but also economic capital. As described earlier, schools that charge fees may not discriminate against students unable to pay, and the system of exemption was detailed earlier under the title "With what". Juxtaposed against the open market of enrolments, there are then strong incentives for fee-charging schools to attract early applications from students whose families can afford fees. No-fee schools—limited in their access to economic capital—must focus on attracting cultural capital instead.

The APOPS is silent on these inequities in the education terrain. As detailed in Soudien, Jacklin and Hoadley (2001), the open admissions policy wallpapers over deep contradictions in the South African policy landscape between unencumbered access and commodification of education. But as Soudien et. al. (ibid) also argue, such contradictions are born from assumptions of adequacy in the provisioning of schools by the state.

White flight

A phenomenon referred to as 'White flight' occurred in some of the formerly white schools (such as School B) after these schools were opened up to students of any racial demographic post 1994 (see Tikly & Mabogoane (1997), as well as Soudien & Sayed (2004) for more discussion). As students of colour began to enrol in these schools, White parents withdrew their children. Given the (prevailing) coupling between racial groups and economic means, this exodus on the part of middle-class white parents often meant schools lost access to fees. The incoming students of colour were often (but not always) far less wealthy and unable to pay the fees to the same degree.

Elite schools in the province, such as School A, are now racially diverse, although with White students disproportionately represented compared to the population average. As the alignment with race and class have gradually loosened over 25 years, the racial profile of fortified schools has adapted to this reality, with transformation sufficiently slow so as not to trigger 'White flight'.

Evidence of White flight, however, is still predictive of a once fortified school whose field position and student intake have drastically weakened since the advent of democracy.

6.4.3 Schools' enactment of the APOPS

What remains to discuss is how the thread whom, shaped by the APOPS, now connects to the whom of the timetable described in the previous chapter, particularly in schools' available forms of capital for timetabling.

Both schools in this study managed to attract more applicants than they could admit, allowing them to select a subset. In both schools, selection often included extensive interviews with applicants who were not obvious shoe-ins for a place ("That's my second term"—School A principal when asked who does the interviews). Both schools asked applicants to complete written tasks in English, which allowed them to gauge both applicants' English proficiency (since both schools are English-medium schools) and ability to communicate in written format—a necessary skill for higher formal schooling⁵⁵. This written interview task indicated an important aspect of an applicant's cultural capital for schooling.

⁵⁵ Such a criterion may seem ludicrous, but given SA primary school students' struggles with basic literacy, students often reach high school with less than adequate writing skills in the medium of instruction (Kapp, 2004).

Both schools also described their selection criteria as looking for a 'special something'. That their yardstick should be so vague is not surprising given the strong legislation against explicit forms of selection. But avoiding being accused of bias is not the only potential reason for such a vague sense of admission decisions: the 'special something' is not unlikely to be the correct habitus for school and certain types of teaching and learning. That schools are unable to articulate this clearly is precisely the difference Bourdieu described when he referred to the logic of practice versus the practice of logic. School staff are unable to articulate what it is about a candidate that makes them admit or reject that application: they have an implicit practical 'sense'—cultivated from years of teaching and managing schools—about how to read a student and what tacit cues give indication of the criteria they seek.

Such an instinct should not be read as each school being cryptic or laissez faire in how applications are handled. Both schools' application forms were extensive, students' marks *were* considered, as were their interests and bearing in interviews. Rather, it was not any one of these issues, but a sense of how they combined that made the schools decide who should be awarded a place and who should not.

There were differences in the schools, however. The *field* position of each school was significantly different, and this had repercussions for their perceived desirability in the schooling market. As discussed in Chapter Five, School A commanded in excess of six times the places it could award. School B commanded between two and three times in excess applications. School A enjoyed a prestigious reputation as one of the top performing public high schools in the country. School B enjoyed a reputation as a 'school we can send our kids to' amongst marginalized communities in the townships of Cape Town, but was certainly not a contender as a top school in the city, and had experienced total White flight since the mid-1990s. Most significantly, School A could attract a large middle-class applicant pool, the majority of whom could most likely shoulder the schools' fees. School B attracted a lower-middle/upper working-class clientele, whose fee carrying capacity would be drastically less. While both schools admitted fee-exempt students, in School A's case, social capital meant that their alumni network sponsored fees for this minority. School B had a larger percentage of its student population in this position, and no alternative forms of capital to fall back upon.

Ordinary public schools, then, need their applicant pool to have three qualities: there should be more applications than the school can accept (to avoid being forced by the PED to take students rejected from other schools); a significant proportion of the applicants should be willing and able to pay fees, and; a critical mass of the applicant pool must bring

a habitus and cultural capital in tune with the field of schooling. Schools that have the first two but not the third criterion will still struggle to produce high summative assessment results. High results are the strongest bulwark a school can erect against a reduction in field position (and the concomitant loss of capacity to reproduce results and sustain income flows). By combining the cultural, social *and* economic capital of their student intake (along with their historical material and social capital), schools are differentially equipped to sustain their position in the field through the results they produce.

The mechanism of this reproduction of a school's field position—producing consistently high senior certificate results—is a different form of capital, namely symbolic cultural capital. A school's results signal to future prospective students what they can expect from the school and shapes the applicant pool in the marketized terrain constructed by the APOPS.

Schools also manipulate the forms and values of this symbolic cultural capital by their interpretation of the curriculum and how they admit students against this interpretation. The next section discusses this curriculum thread—the what.

6.5 What: curriculum

The penultimate policy thread identified by viewing policies through a timetable lens is the curriculum. Of the multiple texts that make up the total Curriculum and Assessment Policy Statement (CAPS), there is one main text that shapes timetables: the National Policy pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grades R-12, referred to here as the NPPPR.

Curriculum in South Africa is centralized, with provinces having very little influence in interpreting or enacting this policy thread. The follow analysis, then, lacks a provincial component.

6.5.1 The NPPPR

The NPPPR could be considered to be the backbone of the curriculum policy suite: it provides the scaffolding for the detailed content and pacing documents for each learning area and each grade. For each official phase of schooling, the NPPPR outlines:

- what subjects can be offered (and in what combinations)
- the number of contact hours per subject each week

- what constitutes minimum pass criteria for students to progress to the next level of schooling, and
- under what conditions these criteria can be relaxed or bypassed.

In doing so, it specifies the legitimate strategies schools have available to combine forms of cultural capital and rhythms of learning into the symbolic capital of exam results.

6.5.1.1 Forms of capital

The NPPPR does not directly prohibit schools from accessing capital: any school can, within its means, offer any of the subjects outlined in the NPPPR to its students, provided the combination requirements are met.

The policy's effects play out, rather, in predictable patterns based on schools' contexts. That is: what constitutes recognised cultural capital in the broader field of basic education may or may not coincide with what forms of cultural capital are immediately profitable in the micro-field of the school. Schools experience significant pressure to maximise pass rates in their Grade 12 examination results, and will strategize their curriculum offerings towards this end.

Constraints in curriculum differ between the two phases of schooling present in high schools, namely the Senior Phase (Grades 8 and 9), and the FET Phase (Grades 10–12).

Senior Phase

Subjects for Grades 8 and 9 (the final two years of the GET phase of school) are prescribed by the NPPPR. All students, irrespective of location, race, language or means, must have the following nine subjects taught in these proportions:

Subject	Weekly allocation (in hours)
Home language	5
Mathematics	4.5
First additional language	4
Natural science (a blend of physics, chemistry and biology)	3
Social science (a blend of history and geography)	3
Technology	2
Economic and management sciences (EMS)	2
Arts and culture	2
Life orientation	2
Total	27.5

Table 6.15 Mandatory subjects in Grades 8 and 9 in all schools.

The SP subject bouquet is uniform across all schools (although it is selectively enforced—see Chapter Five).

FET Phase

The final three years of high school are more fluid in terms of curriculum. Students continue with their languages and life orientation classes, and are given the option of continuing with mathematics or taking the alternative offering of maths literacy (a subject more oriented to everyday numeracy rather than abstract algebra, trigonometry, calculus and geometry). All students must take two languages, LO, and one maths option to construct a legitimate school leaving certificate.

In addition to those four subjects, students must also select three subjects from a wide range of elective options that are recognised for the purposes of the national senior certificate (see Appendix O for a full list of these). Schools can offer whichever subjects they have the infrastructure and staff for, and students may select which electives are available at their school, or even transfer schools should their preferred choice not be available.

Within these options in the FET phase, different subjects are considered more or less prestigious i.e. carry more or less cultural and symbolic capital (similar to Teese and Polesel's (2003) study). STEM subjects in particular, such as mathematics or physical science, are seen as the yardstick by which to gauge the quality of teaching and learning that a secondary school offers, as they are considered high stakes 'hard' subjects that a school will only risk if it is confident students will cope. Schools unable to attract and retain NSC candidates who are likely to pass these high stakes subjects will encourage students to take subjects perceived as 'softer' (E.g. maths literacy or consumer studies)⁵⁶. The NPPPR, then, shapes the basket of cultural capital that offers schools the best return on investment.

Table 6.15 already presented some information as to how the NPPPR aligns cultural capital and timespace. The next section gives this aspect of the policy more focused consideration.

⁵⁶ Dr. Jon Clark (2015) of the UCT Schools Development Unit has done empirical work on elective selection and student mobility when comparing fortified fee-charging schools from Cape Town suburbs and no-fee schools in a large township located in the city.

6.5.1.2 Timespace-conceived

The NPPPR makes explicit two aspects of how timespace is conceived in school: firstly, in how time is to be divided between curriculum areas; and secondly regarding the pacing of learning and students' progress. Of all the policies thus far examined, it is the closest to the process of timetabling.

The policy implies a very linear formulation of timespace, with all students joining Grade R (the entry point into the public education system) at the same age, and each moving up a grade with each calendar year, for a total of ten years, to complete General Education and Training (GET) i.e. Foundation, Intermediate and Senior Phases.

In addition to the mandated hours per subject for Grades 8 and 9 stipulated in Table 6.15, the following constraints are in place for the FET Phase (Grades 10, 11 and 12):

Subject	Weekly allocation (in hours)
Language 1	4.5
Language 2	4.5
Mathematics / maths literacy	4.5
Elective 1	4
Elective 2	4
Elective 3	4
Life orientation	2
Total	27.5

Table 6.16 Subject time allocation in the FET Phase according to the NPPPR.

Some of the specific features of the NPPPR regarding timespace are discussed below.

Uniform progression

Repeated non-conformance to the ideal rhythm of 'one year of learning equals one calendar year' is cast as 'barriers to learning' in the NPPPR, with students experiencing these barriers as having 'special needs'. This homogenizing effect on all students learning at the same rate from the same age belies the reality of differences in learning, and experiences of learning (Biesta, 2013a, 2013b), across a vast population of students.

It is almost as if rational monochronic time is expected from the body itself:

Progression from grade to grade through (each) phase within the appropriate age cohort should be the accepted norm... (a) learner, who is not ready to perform at the next level, should be assessed to determine the level of support required.

(NPPPR, S.7(1), S.14(4), S.21(3))

The policy to 'repeat only one year per phase' is in keeping with this normative linear framing of ideal timespace. Students who have already repeated one year in the three-year phase are 'condoned' i.e. sanctioned to move to the next grade (see the analysis of the Admissions Policy for more on this), even when the minimum criteria for promotion for the grade have not been met. This stance is based on the premise that retention and repetition rarely increase learning (APOPS S.31).

Changing electives

In addition to students not moving through the system as efficiently as the policy envisages, there is also a tension between the electives students choose at the end of Grade 9 and the school's need to maximise symbolic capital. Section 35 of the NPPPR details the procedures for changing electives in the FET Phase. A student may change **two** subjects before the mid-year holiday in Grade 10 (NPPPR S.35(1)), and again make **two** changes before the end of February in their Grade 11 year (NPPPR S.35(2)). In rare cases and with the PED approval, **one** subject can be changed in the first month of Grade 12, in which case the NPPPR expressly exonerates the provincial education department for any culpability regarding the student's assessment outcomes as a result of this change.

Such turbulence in electives might seem to serve neither students' nor the school's interests, given that elective changes could mean a student has missed out on anywhere up to two years of curriculum learning for that subject. But this need for stability and curriculum coverage can be at odds with a school's need to be perceived as offering students their preferred subjects (even if these are academically ill-advised), or sustain enrolment rates for prioritized subjects to be eligible for certain types of conditional funding (e.g. the Dinaledi criteria outlined earlier). As students then self-select out of more prestigious academically demanding choices, the school must contend with not only the churn between timetable allocations, but also the learning gaps students bring to their new elective choices.

Contradictions in the NPPPRs framing of timespace

There are some contradictions regarding timespace in the NPPPR, which arise in clauses on how to deal with students who 'fall behind' in their learning. Section 21(3) states:

A learner who is not ready to function at the expected level and who has been retained in the previous phases for four (4) years or more and who is likely to be retained again in the third phase for four (4) years or more, should receive the necessary support in order to achieve an appropriate level of competence... in order to progress to the next grade.

(NPPPR, S.21(3))

Whether such “necessary support” is provided during or after the school day, this clause assumes an elasticity in school resourcing and contact time (and space!) to provide such support. Staff with free periods (or free afternoons), rooms available for use, and/or reasonable class sizes to allow for closer attention from the teacher, are all material conditions required for this “necessary support”.

6.5.2 What tangles with whom: languages

Beyond the pressure on schools to tacitly select students with high reserves of cultural capital, both in terms of prior attainment and habitus, the curriculum directly affects student enrolment through the language offerings of the school.

A decontextualized reading of the NPPPR might conclude that all languages are treated equally regarding selection and assessment. However, while many students might wish to ideally select two indigenous African languages as their first and second language subjects, they are unable to do so, since assessments and teaching materials outside of language subjects themselves are only offered in English and Afrikaans⁵⁷. This means students need to take either English or Afrikaans as one of their languages in order to access the curriculum in the senior grades, and write their school leaving exams.

In reality, then, the language options schools must offer from the NPPPR’s framework *must* include at least English or Afrikaans (if not both) for school examination purposes. In addition to this, one of these two languages must be at Home Language level for school-leavers to access tertiary education, as these are the primary media of instruction at universities (for example, a school could not offer isiXhosa Home Language and English First Additional Language if its students wished to study further, even if such an arrangement accurately reflects students’ linguistic repertoires).

Given these constraints produced by interacting policies, schools serving diverse student bodies will either need to source additional teachers (at often prohibitive cost) to offer second language choices in line with the various languages of their students, or expect students to learn—and learn through—languages that are not their dominant linguistic codes. For fortified schools serving middle class students, the language of instruction and assessment is often also the language of the home. But for exposed schools, divergent linguistic needs are the reality, and language offerings must be negotiated in often uneasy settlements which are not obvious from the NPPPR’s egalitarian framing.

⁵⁷ Of the eleven official languages of South Africa, English and Afrikaans are the only two with Eurocentric origins.

6.5.3 Schools' take up of the NPPPR

Deviation from policy

Despite the NPPPR being relatively unambiguous and clear cut in its constraints on subjects and time, both schools in this study deviated slightly from the precise hours (School A deliberately and School B by default), and School A also deviated significantly from the Senior Phase subject stipulation. Schools' willingness—and capacity—to interpret the NPPPR contextually constructed cultural capital for the process of timetabling discussed in Chapter Five.

To recap from the previous chapter: in the case of School A, the 27.5 was reduced to 27 to fit into a neat arrangement of the school's weekly rhythm of breaks and meetings, and still allow an earlier Friday home time. School B, on the other hand, ostensibly intended to conform, but struggled to make the minutes add up in light of obscure and varied lesson lengths, themselves a product of timetable adaptations to students' realities (see "Chapter Five" → "School B").

A school's interpretation of the NPPPR's subject offerings has significant implications for what its students can do after secondary schooling. Schools must strike a delicate balance between managing their reputation as evidenced by their Grade 12 pass rate and considering the value (i.e. the symbolic capital) of the national senior certificates that they produce. As stated by one deputy principal at School B:

Like other schools, they don't offer maths. The child must do maths lit(eracy) with physics and nowhere in this world can you go anywhere with maths lit and physics, or maths lit and IT. And that is to hold the? Passing rate! And I mean, what are you doing, what are you doling out to that learner with nothing? They can't go anywhere... they can... I always tell them they can only jump up and down in the foyer because they passed. Once they leave that gate that means absolutely nothing.

School B Deputy Principal

The deputy at School B was palpably frustrated at other schools who place their own interests above those of their students, by offering subject combinations from the NPPPR to boost passing rates without considering students' further education opportunities (both physical science and IT require mathematics to be considered for university entrance).

In contrast, School A (ironically) built capital *by deviating* from the mandates of the NPPPR and constructing a narrative of autonomy via this successful deviation. Such was the strength of their field position, and the reliability of their Grade 12 results, that they chose to interpret the NPPPR as they thought 'best', creating an impression of 'untouchability'

from political interference which in itself could be considered a form of social capital (and deeply appealing to middle class families, who wish to fortify their children's inheritance of advantage against state interference).

The following excerpt from an interview with the school timetabler gives insight into the fortification that the school enjoys when interpreting the NPPPR to construct the timetable:

Timetabler: So, for us it's about just massaging the nuances... and saying 'ok, let's see how we can add an extra period for this and put the extra period over there'. So that's kinda, that's kinda what we do. And so, once we get that mandate (from the principal), we update on it and make sure that its... So that's how it changes, because we, we manage it in a different way. Um, and then we decide on that and that's what we work with.

Interviewer: And the (provincial) department don't moan too much?

Timetabler: They do! They moan all the time...

Interviewer: Oh really? The curriculum advisors come down?

Timetabler: Because the school gets such good results I think we're able to negotiate our way through it. And they know that the program we offer is one that is producing the results and there's very little that you can argue with."

Here the timetabler from School A is describing how the school is allowed to alter the subject offering in the lower grades (Grades 8 and 9), and that the principal makes these decisions to deviate from the mandated policy.

Table 6.17 below shows the hourly allocation by both schools in the Senior Phase. School A's deviations from the stipulations in the NPPPR are highlighted in grey:

Subject		NPPPR requirements (in hours)	Grade 8		Grade 9	
			A	B	A	B
English (first language)		5	4	5	4	4,5
Second language		4	3,5	4	3,5	4
Third language		0	2	0	2	0
Mathematics		4,5	4	4,5	4	5
Social Science	Geography	3	2	3	2	3
	History		2		2	
Natural Science	Life Science	3	2	3	2	3
	Physical Science		2		2	
Technology		2	2,5	2	0	2
Economic and Management Sciences (EMS)		2	0	2	2,5	2
Art and Culture		2	2	2	2	2
Life Orientation		2	1	2	1	2
Totals		27,5	27	27,5	27	27,5

Table 6.17 Allocation of time to subjects across both schools in the Senior Phase.

Table 6.17 shows that School A has altered the time allocation across almost every learning area. Technology is only offered in Grade 8, and EMS only in Grade 9. Life orientation (LO) is halved (see below), whereas natural science and social science are both unbundled and accorded an extra hour a week each (see Chapter Five for how this affected timetable design). English is also decreased by an hour a week (since the students are first language English speakers—or as good as—this is a viable strategy). Half an hour is shaved off the second language and mathematics to create space for the third language offering during the school day (which the NPPPR states should only be done after normal school hours). As described in Chapter Five, School A deviates from the NPPPR constraints to make the lower grades match as closely to the FET Phase subject spread as possible.

This finessing contrasts with School B's experience of how curriculum policy is enforced:

Interviewer: How much leeway does the department give you in terms of your interpretation of the curriculum? I've seen some schools where they'll cut down on the hours for something like tech(nology), or arts and culture, and offer something else instead.

Principal: It's basically illegal. They get away with it depending on who they know, and who they are.

Interviewer: Do you get any leeway? Or are you kind of also policed?

Principal: Yes and no. We are policed... the trouble is it catches you out if you have a Whole School Evaluation. Or they have a complaint. Then they come and check. And they even went

to the point where they went, no, our time is right and then they... and this is really pathetic... then they said, "No it's not". And I said, "why not?" (they said) "no because some subjects the periods are not an hour on certain days. So, if you add up all the days, they end up being ten or fifteen minutes short over the cycle". I said "Excuse me? So?" (they said) "No, then you don't comply".

Interviewer: It gets that nitty-gritty? Wow

Principal: It's pathetic. I couldn't believe it actually.

School B Principal

The differences of the two schools' experiences of enforcement of the NPPPR suggests that field position and the symbolic capital of sustained high performance at summative assessments is not only convertible into economic and cultural capital through attracting students (see "Whom"), but also into autonomy from authoritative oversight. This results in an increased liquidity of timespace for a school to adjust and adapt its rhythm and offering as it sees fit. Exposed schools, lacking such symbolic capital to bulwark themselves against authoritative interference, are bound to far more rigid compliant enactment of the NPPPR.

The next section looks briefly at the case of LO as a telling aspect of curriculum that entrenches schools' fortified or exposed status.

Capital begets capital: the case of life orientation in Grade 12

In the case of the assessment of life orientation (LO) in Grade 12, the NPPPR interacts with position in field for secondary schools. According to S.31(2) of the NPPPR, LO is the exception for assessment in this grade, with the whole subject result being constructed from school-based assessments (SBA), and no final external examination being required.

LO is a subject conceived (ostensibly) to provide life skills for students, including learning about religious practices, sex education and habits of self-care. School A did not prioritise LO as a subject: it was seen as carrying little to no cultural capital, and this was reflected in the time allocation set aside in the school's timetable. School A's career counsellor, who was responsible for convening LO as a subject across the school, remarked on how her subject was accorded low status by her colleagues, and how she had to battle to get their cooperation to meet the curriculum requirements. She is the only teacher in the school qualified to teach the subject, and stated that before her arrival, the LO curriculum was laissez-faire and not prioritized. For School A, it was assumed these life skills were already conveyed to their students at home.

However, LO results are often high in national senior certificate results across the board, even in exposed schools. Students' with lower exam results often depend on their LO mark to pass their overall senior certificate: this means schools serving such students have a strong incentive to prioritise LO as a curriculum area. School B's NSC results show LO to be one of the subjects with the highest performance (see Appendix D). Hence, while the subject's attached cultural capital is limited in terms of external recognition, increasing the LO assessment results is a worthwhile pursuit for schools struggling to produce cultural capital, as it increases the overall pass rate.

However, *assessing* LO is a time consuming and laborious process. Other subjects in Grade 12 are 25% assessed at school and 75% assessed by an external examination which is marked by independent examiners. LO is 100% SBA, and the submission comprises a complex portfolio of work which students must compile and submit, and teachers must mark.

While this assessment burdens applies equally across fortified and exposed contexts, it grips differently. The more a school relies on LO assessment outcomes to bolster its final Grade 12 results, the more effort and attention marking extensive LO portfolios will command from school resources. Fortified schools can afford to marginalise and downplay LO in favour of subjects that carry more externally valued symbolic and cultural capital, and in doing so, potentially avoid an enormous work task of maximising LO results. Fortified schools also attract students of a more middle class habitus who are likely to come from home environments that ease the school's burden of delivering the LO curriculum. They are also more likely to experience fewer challenges in the completion of extended home-based assessment tasks and projects (as compared to school-based written examinations).

The case of LO highlights the lines of distinction between fortified and exposed contexts: schools' enactment of curriculum requirements extends beyond subject choices to include subject prioritisation. For exposed schools, investing in LO yields an important boost in the short-term assessment results, although at a high price in terms of workload and for a form of cultural capital that is not recognised outside of school. Fortified schools do not depend on LO in the same way, sparing their teachers the effort, and keeping their gaze on bigger prizes over a longer time horizon, as they focus on subjects that gain access to tertiary education.

All the policy extracts identified in Table 6.1 have been examined in detail. But there is one strand that has not been explored: where. This strand is currently the focus of multiple court rulings and conflicts. The next section briefly describes why current policy for this strand does *not* reach, and the consequences for schools' access to forms of capital and capacity to organise timespace towards teaching and learning.

6.6 Where: school location and infrastructure

Chapter Four outlined how the strand where for timetabling referenced both the geographic location of the school, as well as infrastructural provisions. Each facet is discussed briefly with regard to what policy contestations are currently playing out and why these matter for ordinary public schools.

6.6.1 The Minimum Norms and Standards for School Infrastructure

In 2013 a local NGO, Equal Education, won a court ruling against the national Department of Basic Education regarding state provision of school infrastructure. The case primarily focused on no-fee schools, particularly what are referred to as 'mud schools' in the former Bantustan territories, after several accidents wherein students had suffered injury or death as a result of grossly inadequate school infrastructure. The court ruling stipulated that the DBE was in contravention of children's basic right to education when the infrastructure of a school was unsafe and derelict. The result was the Minimum Norms and Standards for School Infrastructure (MNSSI) (Department of Basic Education, 2013a).

However, this policy—which affects timetables—does not reach into schools in the same way as the others listed. Despite protracted legal battles for the establishment of such norms and standards, and despite said policy listing its scope and application as "all schools" (MNSSI, S.3), the reality of schooling infrastructure is a far cry from the norms outlined therein and will be for some time. As recently as 2018 the Constitutional Court ruled to hold the Minister of Basic Education to the MNSSI. The Minister has subsequently suggested a separate unit of government responsible for building schools (Timeslive, 2019) and further research has been done on the government's seeming inability to effect this policy (Equal Education, 2018). School infrastructure is still, twenty-five years after the official demise of apartheid, predictable by the apartheid-era department under whose jurisdiction it fell, and the differentiated infrastructural development of that era persists into the present day.

The lack of reach of the MNSSI is indicative of the power relations between schools and the higher levels of government bureaucracy. Unlike the other threads thus far examined which entailed the department (national or provincial) stipulating requirements and lower levels (provinces and schools) enacting them, this thread requires upward pressure from the schools towards the department to enact. Its lack of reach suggests that schools have little to no recourse in instances where the governmental structures do not uphold their obligations. Certainly, the exposed schools most affected lack the economic capital required to engage in juridical conflict without external support. Thus, another facet of fortified/exposedness lies in schools' capacity to protect their interests using legal processes and structures.

Infrastructure quality and quantity is, then, still primarily a function of inherited economic assets and the private capital schools can gather. While both schools in this study inherited similar types of infrastructure in the mid-1990s, the state of this infrastructure is now vastly different. This is explored more in the next chapter when rhythms in timespace-lived, including rhythms of material space, are considered.

6.6.2 Where affects whom and with what: feeder zones

The second aspect of where described in Chapter Four is a school's geographical location. Section 6.2 described the quintile system, whereby a school's relative wealth is proxied for by its immediate surroundings, and that this assumption creates a gap that affects schools in wealthy areas that serve poor students.

The APOPS also contains a short policy on school zoning, describing a school's location and its relation to its students geographically. Using this policy, provincial heads of department can, in theory, disrupt the schooling market by designating feeder zones for a particular school "in order to control the learner numbers of schools and coordinate parental preferences" (APOPS S.33). These zones need not be adjacent to the school.

Schools that command extremely strong field positions benefit from a totally free market of applicants. But schools that wish to artificially fortify against change amongst their student population might be able to deploy feeder zones strategically, especially if these zones are aligned with apartheid spatial geography. APOPS S.33's deference to parental preference regarding zoning suggests parental voice in the decisions about zones carries weight.

Current contestation around the delineation of such zones is playing out in the Gauteng province, where the head of that department wishes to *disrupt* apartheid spatial

balkanisation by creating heterogenous feeder zones (Mail & Guardian, 2018a, 2018b). This is intended to force homogenous fortified schools to take on a greater variety of students than they currently do under laissez faire market forces, and is being met with consternation by conservative communities and lobby groups (Afriforum, 2018).

The efficacy of feeder zones to disrupt cycles of fortification and exposure is limited, however, to the political will of the provincial executive. In the Western Cape where this study was conducted, the province is governed by a political party that is pro-free-market, and zoning has not been legislated by the province (Western Cape Education Department, 2018c). In the case of School A, the ability to command excess applications from far and wide allows for the creaming of students from a broader pool. School B is already a commuter school that has experienced White flight and no longer draws students from the surrounding suburbs: it hence also requires a free moving student market to continue maintaining its enrolment numbers.

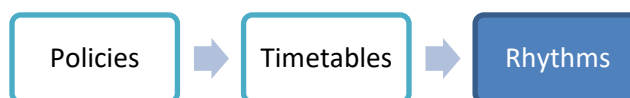
The where then, as far as policy is concerned, is deeply contentious and far from decided. Of the five strands of policy that shape timetables, this strand continues to pull along historical lines, now exacerbated by market forces. The project of apartheid that knotted race, language, means and location, and its subsequent entanglements, persist into the present day.

6.7 Conclusion

This chapter has considered the *origins* of the forms of capital schools have available to them to construct their timetables. As policies were explored, the interactions between them were unpacked to draw a richer portrait of how these threads enmesh in schools' contexts. How the policy avails (or doesn't avail) forms of capital to different types of schools, and how it shapes (explicitly or tacitly) school timespace was examined. The enactment of each policy was considered for each school in the study, to connect back to the forms of capital each school had available for building timetables as discussed in Chapter Five. Provincial interpretations were explored where applicable. As each policy was detailed, lines of fortification and exposure emerged in how policies interact with the field of schooling and the historical and current inequities that characterize their contexts.

Having excavated the roots of the schools' timetables to uncover their policy origins, the next chapter now turns to look at the rhythms each timetable orchestrated in each school's everyday activities.

7.

Everyday rhythms and the timetable's hold on them**7.1 Introduction**

(P)ractices are (not) determined by built form (no matter how hard the planners may try); for they have the awkward habit of escaping their moorings in any fixed schema of representation.

(Harvey, 1989, p.204)

This final analysis chapter details the rhythms of each school throughout the first term of an academic year. It seeks to locate the timetable as the artefact regulating—but not determining—teaching and learning rhythms in each school, and show how the qualities of the timetable and the school's forms of capital affect these rhythms.

To recap: Chapter Five examined the qualities of each school's timetable, looking for elasticity, granularity and modularity, along with the forms of capital underpinning these qualities. Chapter Six then excavated the origins of these forms of capital—and their differences—in policy texts. The ideal use of timespace as conceived in policy was also discussed, along with provincial interpretations of national policy and the relevance of this for each school site.

The five-stranded model described in the analytical framework provided a neat structure for analysing timetables, since a timetable is a logical artefact that complies with rational rules about contradictions, order and linear timespace-conceived. Schools' everyday realities are not so neat and tidy: that is, timespace-*conceived* and timespace-*lived* are very different. The five-stranded model does not transfer as a structure for the complexity of students' and teachers' day-to-day experiences and activities.

This chapter, then, is laid out differently to the previous two. It begins with a systematic analysis of each school's adherence to its own timetable, as evidenced by school-wide data produced over a week in the middle of the term (see Chapter Four for more details about how this data was constructed). A colour visualisation produced from this data is used to map the closeness between the timetable and the school's rhythm, without creating artificial measures for a non-quantitative phenomenon. This visualisation is then discussed in conversation with each school's timetable elasticity, granularity and modularity.

From this data visualisation, deviation from each timetable is described, identifying two forms: deviation by design (i.e. intended, planned and controlled) versus deviation by default (i.e. unexpected, reactionary and requiring response). Qualitative data was also drawn upon to detail how the timetable came to regulate the tempo at each school at the beginning of the academic year.

But the data visualization—like all synoptic ‘illusions’ (cf. Bourdieu 1990)—obscures some aspects of reality in order to foreground others. Hence, to texture the description of timespace-lived and its relation to rhythm, common themes identified in the observation data and interviews are discussed for each school. These themes identify other rhythms critical to school activity, and their relation to the rhythm of teaching and learning. In addition to adding richness and depth to the origins and form of deviations, these data were used to examine: the rhythms of discipline and dressage at each school; the role of material space in interrupting or enabling eurhythmia; and timespace-perceived (i.e. experienced) by teachers and students. What emerges is the polyrhythmia in the movement of bodies, objects and information around each school and its relation to the tempo of the timetable.

The chapter then closes by contrasting each school’s rhythms, the role of the timetable in these, and how the themes identified intertwined to create different orchestrations of teaching and learning. These are then discussed in relation to each school’s summative assessment outcomes, foregrounding the relationship between rhythms and results.

7.2 School A

School A’s timespace-lived was characterised by a steady rhythm in teaching and learning, supported by a polyrhythmia of other activities around the school.

7.2.1 Rhythm intended and rhythm enacted: timetable adherence

The intended rhythm of teaching and learning intrinsic to a school’s timetable represents the school’s timespace-conceived. However, such conceptions may be markedly different from timespace-lived and what students and teachers do on a daily basis.

School A’s timetable was a reliable indicator for schooling activity throughout the fieldwork period (start of year mid-January until Easter holidays at the end of March). Appendix A includes a detailed data visualisation of School A’s actual activities over a week in the middle of the term.

The infographic details how lessons occur as intended (green), with ample rooming elasticity at any one time (white) as was the case in the timetable artefact (see Chapter Five and Appendix C).

Room sharing (dark green—teachers using other teachers' rooms) was also common place, as School A had two full-time teachers, two part-time teachers, one deputy and the principal as roving teachers without an allocated room.

Unscheduled room swaps were also common (yellow). In particular, the technology teacher often used the computer laboratory for lessons, and the teachers giving drama or whole class music lessons would make use of the (empty) hall spaces. In one instance, a teacher giving an LO lesson moved her students to the sports hall impromptu, as there was 'better wi-fi signal' than in her home room. In another case, an Afrikaans teacher took the students to the field for a hot day to sit in the shade where it was more pleasant (see "Timespace-perceived"). Substitutions for absent staff made up 2% of the week's total lessons (orange).

While plenty of elasticity is evident amongst the 45 teaching classrooms at School A, use was still made of the five larger halls and seminar rooms. For example, the Grade 12s all gathered for a career discussion with a local university for their LO class, necessitating a room swap from their usual classrooms to the main hall: this was made possible by Grade 12 LO being timetabled in a run (modularity). Good use was also made of the ten smaller rooms set aside exclusively for music lessons, nine of which were for one-on-one tuition (pink).

Of the 1 920 data points collected over a week of schooling, 77% were *exactly* in keeping with the timetable. If minor deviations are included (i.e. a room swap or substitution) then for 90% of the observed time, lessons were happening. The remaining 10% was an intended off-timetable afternoon for a whole school event (dark blue) (see "Deviation by design/default" below).

7.2.1.1 The start of term: establishing the timetable as the axis of rhythm

School A's timetable was ready to go from the first day of term. On arriving at the school in the two days preceding the official start of the academic year, the reception was busy as parents and students collected book bundles prepared for them based on the previous year's subject choices. Teachers were seated in grade-specific clusters in the main hall, planning the year collectively. Class allocations and subject selections were on display in the student foyer for students to examine their specific timetable arrangements. Student

lockers were allocated on the first day of term, and lessons had already begun by 10:30am on that same day.

The primacy of the timetable as the rhythm-setter was never in question at School A, and its closeness to actual events made it reliable and useful to all members of the school community.

7.2.1.2 Deviation by design

Almost all deviations from the timetable at School A were intended, planned and contained within limited timespace. The deviations witnessed are detailed below.

Administration for the start of the year

There were three main deviations from the timetable in the first few days of the term. The first deviation involved induction and orientation activities for the new Grade 8 students, run by the Grade Head. This was a four-day programme run for the first four days of the term, after which classes began according to the normal timetable. On the following Wednesday through Friday in the second week of term, provincial diagnostic tests in English, science and mathematics were administered to all the new incoming Grade 8s. Induction and dressage of this nature was to (re)produce the school doxa amongst the new students (see Chapter Five and "Rhythms of Discipline").

The second deviation was the staggered release of students from class to collect textbooks from the school book store, which was manned by administrative staff. Teachers would bring cohorts of students to the book storage room according to a schedule, where students in groups of four checked out books using a digital identification card. Classes returned to their lesson immediately after.

The third deviation occurred on the second day of the term, where lessons were rearranged to facilitate grade-specific assemblies earlier in the day, and a whole school assembly in the afternoon for an hour. These gatherings were to coordinate and recruit students for their various sporting interests for the year.

Significant off-timetable events in the term

School A's deviations from the timetable continued in this vein throughout the term. There were two whole-school off-timetable events. The first was for a half-day spirit-building athletic event, during which funds were raised from the school community to support less-wealthy students' participation in sporting and cultural tours. The second was for two-thirds of the school day, where the school's heritage was celebrated by inviting the alumni class from fifty years' previous to visit the school—the programme included a special assembly and intergenerational sporting events.

What was striking during observations on both occasions was how lessons continued apace regardless of the imminent diversion. In the case of the athletic event, teachers arranged more 'fun' lessons as the students were noticeably excitable, out of uniform and looking forward to the afternoon... but lessons continued nonetheless. The athletic event also occurred the day after Valentine's Day: to cluster distractions (and minimise the knock-on effects of multiple unusual activities on the regular rhythm of lessons), the Valentine's Day assembly was scheduled on the 15th of February. In each case, the next school day after the event was back to 'business as usual'.

In addition to these whole-school events, there were grade- and sports-specific off-timetable events, including: a three-day camp for the Grade 8s at the end of the term; science and maths Olympiads; a weekend away for the orchestra; Grade 10 history and geography daytrips; and a two-day water polo tour. All events were organised far in advance, and communicated widely via various notice boards.

Compensating for lost time

In addition to managing and anticipating timetable deviations, School A's academic head was also responsible for monitoring lesson loss and its differentiated effects across subject areas. The modularity and uniform granularity of the timetable, combined with the predicted lesson loss through deviation by design, enabled this. For example, if 'Thursday lessons 3 & 4' were lost due to an event, this whole row of lessons could be swapped with another more frequent row to balance contact time between departments (See Appendix A: lessons 5 & 6 on the Thursday were swapped for lessons 9 & 10). The academic head described this process as one of compromise and negotiation, as some departments were particularly protective of their contact time (mostly science and mathematics). But if lesson loss was uncontained, or unplanned, this form of time redress would be difficult to accomplish.

Assessment

Rhythms of assessment relate to rhythms of teaching and learning in myriad ways. Schools are known for going 'off timetable' during examination periods (in South Africa, June and November/December). However, the *degree* of deviation for formal assessment at other times of the year is related to certain qualities of the timetable. As discussed in Chapter Five, School A's modularity enabled parallel lessons for subject-grade cohorts. Throughout the period of observation, tests and assessments happened during normal lesson periods⁵⁸. The timetable's rhythm held all the way up until the Easter break and no 'test week' or deviation for assessment was required. Rhythms of assessment were designed into the timetable through modularity.

End-of-term assessment still weighed heavily on teachers, with many marking furiously in their free periods towards mid-March. Administrative staff also felt the end of term crescendo in assessment rhythms, with the science laboratory technician preparing large quantities of practical kits and the printing room running copies in large batches. However, the distribution of reprographics and other administrative aspects of assessment to non-teaching staff meant that teachers could focus on marking. Class sizes of 30 or less also kept assessment loads limited, and secure non-contact time (see "Substitutions") meant staff did not need to complete all assessment work after hours. Timetable adherence protected non-contact time for planning and assessment activities.

7.2.1.3 Deviation by default

School A at times had to deviate from its timetable unexpectedly. These deviations were always minor and primarily involved absent teachers.

Substitutions

School A experienced teacher absence fairly regularly throughout the term. On most days observed, between one and four teachers were partially or totally absent (the most frequent number being two or three). Reasons for absences ranged from illness, doctors' appointments or other meetings, or school-based activities such as accompanying students on sports tours or events. Towards the end of the term, six teachers were away

⁵⁸ The music department had to work around tests and assessments if they wanted to extract students from classes. For example, on the 7th of February, students were to be involved in a musical school 'show case' for the day. The head of music had to ensure these students wrote any missed assessments early: this compromise was negotiated in the weekly staff meeting.

simultaneously with the entire Grade 8 cohort for the multi-day camp, during which the free Grade 8 teachers who did not accompany them stood in for substitution.

As described previously in Chapter Five, School A had sufficient elasticity in its teaching supply to timetable substitution duty. Thus, even when a surprise event happened such as a teacher being absent, their colleagues did not lose free periods unexpectedly, and non-contact time remained guaranteed and protected. In addition, substitutions were by the half hour, so for most hour-long double periods, two teachers would substitute half and half, guaranteeing each at minimum 30 minutes of their free hour. Substitutions were communicated on the staff notice board with a clear colour print-out compiled by one of the receptionists at the beginning of each day. Any staff who had missed this notice were informed of a substitution duty via the school intercom. Staff performing substitution would move to the room of the absent teacher, where they would supervise students in situ.

One unusual event occurred during observation where the absent teacher's home room was locked: in this case, the substituting teacher, John, moved the students to his own room. As a result, the next substitution teacher did not know where to find the class and John covered the whole hour. John's response to this 'double substitution' was that such things are part of working as a team, and not to be complained about. But such a collegial response is enabled by the rarity of such events, as well as the general knowledge that by and large, free periods are safe and protected.

Often the students would be set cover work, and the substitution teacher would conduct administration or mark his/her own work: they just had to do it in the absent teacher's classroom instead of in their own room or the staffroom. If students completed the cover work, they would use their mobile devices quietly (often using headphones) or complete homework or tasks related to other subjects. Some students would utilize the opportunity to go and practice music in the music block if appropriate.

For the most part, students would wait quietly in their timetabled classroom for the appropriate teacher (whether their usual class teacher, or the substitute) and did not use substitution lessons as opportunities for going off timetable; as mentioned in Chapter Five, the habitus of the students was mostly in sync with the school's doxa.

7.2.1.4 The end of term

Lessons and events continued apace right up until the last Tuesday of term (a day before the official end of term on the Wednesday), including the Grade 8 camp and a whole school musical production that ran its finale on the Tuesday evening. But a visit on the very last day of term revealed that students had indeed gone home early, and staff were busy readying for the next term, preparing reports and completing outstanding planning and assessment.

The primacy of the timetable as the arbiter of activity at School A created a eurhythmic synergy between timespace-conceived and timespace-lived. Long, stable planning horizons combined with ample elasticity across administrative and teaching staff, along with sufficient space to allow for minor flexibility without disruption. Staff could change rooms sans notice without displacing colleagues. Substitutions were woven into teachers' expectations of their day, and hence did not cause conflict or resentment. Students' habitus aligned with schooling goals. Significant deviations from the timetable were anticipated and contained, and lost time compensated to ensure curriculum coverage did not suffer. That is: while School A was not slavish to its timetable and could manoeuvre, such off-script events did not backwash into the main rhythm of teaching and learning.

What the infographic in Appendix A does not show is the fidelity of *movement* around the school in accordance with the *transitions* in the timetable. In this sense, the timetable is impossible to adhere to precisely, since bodies cannot move between lessons instantaneously. Lesson transitions and student and teacher movement between lessons and break times is a potential source of arrhythmia not visible in plans and documents. The next section details how students and teachers moved about the school and the effects of such movement on rhythm, as well as the school's general ethos on discipline issues.

7.2.2 Rhythms of discipline and dressage

The rhythm of teaching and learning at School A was sustained by other rhythms, most notably rhythms of movement about the school. This section discusses the general trend of these rhythms and what structures were in place to ensure compliance with the school's ideal tempo.

7.2.2.1 Transitioning and late-coming

Students and teachers all transitioned between lessons and break times with a sense of urgency during the observation period. Of particular interest to this study was the absence of a school bell: the principal explained how, having abandoned the bell temporarily during building renovations several years ago, the school management realised it was unnecessary as movement could be sustained without it.

The result is a strange 'invisible hand' across the school between lessons and at the end of break: as if by telepathy, students would just begin to move of their own accord approximately three minutes before the end of break. One Grade 8 student explained when asked, "we see the whole lot move... we all move together".

Between lessons, the scraping of chairs and the swelling of voices heralded the change-over. Students moved with purpose and several moments were witnessed in which the students—and teachers—seemed stressed and urgent to make class on time. Transitions between lessons took on average four minutes throughout the term. Every first lesson witnessed started at 8am sharp.

Similarly, student late-coming to school was unusual. Those who arrived late had no access point bar the main reception of the school (see "Infrastructure conditions: material meets social space"). Once they had been granted entry by the receptionist, students collected a 'late slip' to access their class. According to the receptionist, students sometimes avoid collecting slips as these generate a record of frequency, which was monitored and sanctioned by the grade head each week. Approximately a dozen or so students were late on any one day observed: the Head of Discipline at the school estimated 5% of students had an issue with arriving at school on time, and that most of this was down to disorganisation on the student's part, rather than due to transport or traffic concerns. The vast majority of students at School A arrived by private transport. Allowance was allegedly made for those coming from afar, or using public transport, on days when traffic and transport was problematic.

The general student and staff habitus conveyed urgency and punctuality in keeping with the school doxa. This was encouraged explicitly and implicitly by the school: implicitly, by the majority of students complying and hence deviance meaning group non-compliance; explicitly through the Grade 8 induction programme that made the school's movement expectations clear, along with a detention system that punished late-coming and tardiness.

7.2.2.2 Detentions

School A ran regular Friday detentions for a variety of infringements. At the beginning of the year, the majority of infractions were related to uniform and behaviour (e.g. ignoring instructions or talking in class). However, this rapidly changed to the bulk of detentions being for timespace infringements: either being in the wrong place at the wrong time, or **not** being in the right place at the right time. These included late-coming to class, bunking class or not arriving to sports or extra-mural sessions, which were considered as important as lessons (and monitored as such).

During the term observed, four weeks of detention rosters were collected from student noticeboards. In the first week of February, only 28 students had a detention; by March, weekly counts showed between 75 and 87 students had been booked for a detention (that is, 8.2-9.7% of all students), at an average of 2 hours each (although most only served one hour, with repeat 'offenders' skewing the average). Missed detentions resulted in a doubling of detention hours to be served the following week. The punishment for truancy was double the avoided lesson time given as detention.

Students self-reported to detention on a Friday. The first hour was administered by the prefect body of the school, who stated that students on detention "do not usually give much trouble". Students were not permitted any engagement during their detention: they were expected to sit in silence and face a wall. In the words of the prefect who was overseeing a session, "It's meant to be (boring). **It's taking your time because you took someone else's time**".

School A's timespace doxa stands by the dominant norm that time is a commodity, to be exchanged and maximised (or in the case of detention, punitively fined). Another teacher remarked in response to the observation about student timeliness and conformity to rhythm, "It's a life skill: it's a life skill they are learning." The dressage imposed by detention is seen as formative and part of the school's hidden curriculum: to be punctual and take time 'seriously', cultivating this attitude as a 'life skill'. Viewed through a Lefebvrian lens, these structures and discourses about punctuality and 'not wasting time' dressage students into a monochronic time-as-commodity approach for adulthood.

The delegation of the first hour of detention to prefects also supports the framing of 'time-as-commodity' at School A. As explained by the head of discipline at the school, detention is seen as a waste of staff's time: after prefects have taken the first hour, the subsequent sessions are overseen by senior staff. P1 teachers did not invigilate detentions.

Bar acknowledging that students slip a little towards the end of term with compliance, the head of discipline felt that overall discipline was “not a problem” at the school:

I think at School A it has a lot to do with the culture of the school. That is when pupils come in, I think that’s part of the culture of the school, that pupils are respons... we give them a lot of responsibility and that’s kind of the accepted way in which the school runs. They run a lot of the pupil things, a lot of the discipline is left up to them. We don’t spoon feed them. **So that self-regulation is part of the culture**, the ongoing culture of the school.

Um, we want them to develop responsibility and we don’t want to have to point out every single thing and have to tell them what to do in every single instance. I think it becomes stifling, as a pupils-against-staff kind of system, instead of us working together, so it’s never a system that worked or happened at School A.

School A Head of Discipline

The head of discipline did recognise that the habitus of the students that School A enrolled was conducive to fewer discipline issues, and that the initial dressage in Grade 8 folded new students into the rhythm of the school:

I think that, as <the principal> often says, we are in a very privileged position, we can choose 180 Grade 8s from over a thousand, so if our discipline isn’t good and we’re not getting the sort of results that we get then we’re not doing things right. We’re dealing with good kids, and we need to produce the goods. The other side is that they are aware that they are fortunate, that they’ve been selected, because we think that they deserve to be here.

I don’t know if you are aware of <Grade 8 Head>’s whole induction programme for the (Grade 8s): that (is) where prefects, myself, other senior staff lay out very clearly the ethos, the rules, the way in which the school functions so they are brought into that right from the beginning.

School A Head of Discipline

The principal of School A also acknowledged that such things are “easier to sustain than to change”: that is, School A knows its field position is strong, and that this enables them to select for cultural capital and habitus that is in keeping with doxic rhythms of the school (what the head of discipline referred to as “good kids”). What deviation does arise is dealt with through the dressage of detention, with the workload of monitoring and enforcing delegated across multiple structures in the school (prefects, grade heads and senior management). Normal class teachers are freed up from this extra work to focus on teaching and learning. But the efficacy of this dressage relies on deviance being the exception. The majority of students synchronised to the school’s rhythm through a student habitus that fit the school doxa.

7.2.2.3 Assembly

Several assemblies were observed during field work at School A. In general, these gatherings were tightly coordinated events, with students lining up and forming rows in relative quiet (for a gathering of almost a thousand people). Once in formation, a specific sequence of activities was followed: the entrance of the principal and student leadership; whole school singing; motivational talks by a member of staff or a student; and announcements of past or upcoming events.

Beyond the formation and reinforcement of idealised student norms (similar to those discussed in Silbert and Jacklin (2015), and Silbert (2012)), assemblies offered insights into both the school's dressage practices and its timespace doxa.

Dressage

Assembly evidenced the whole school's synchronicity through social and physical space. Bodies of staff and students moved in formation quickly, each knowing its place and the rhythm of the assembly ritual. On average it took approximately five minutes for almost 1 000 people to move into the hall in the expected arrangement, with little to no explicit direction. Prefects and teachers took up observation positions to detect uniform infractions, behaviour infractions and absentees, which were recorded for detention rosters. The attending deputy addressed students by their grade groups, and often whole grades would move in lock-step on instruction (e.g. when the Grade 10s were asked to make space for the Grade 11s, they were ordered, "Grade 10: take one step forward!"). There were few reprimands observed during assembly.

Timespace and activities

The overwhelming majority of announcements during assembly were of the format:

event X at time Y in location Z

...reaffirming to students the strict and calendar/clock driven approach to organising activities in timespace that permeated the school. Many announcements included meetings during the break time that followed. On dismissal, students would disperse to their relevant gatherings to meet teachers, teams and clubs in coordination with the announced notices.

Assembly and deviation

One assembly was markedly different from the others: the student-run Valentine's Day assembly, which was led by the prefect body and included a pageant show and music by a popular artist. This event was far more raucous and included students singing, applauding and—at times—screaming in support for a particular joke or popular senior student. Towards the end of this event, most staff had left the hall and made their way to the staffroom (where the cacophony was still audible) and students continued with their gathering unsupervised.

From a rhythm perspective, this student-led assembly was clustered together with another off-timetable event in order to contain disruption (See "Deviation by design"). Senior management saw such allowances as enabling for students to enjoy their school without yielding the driving seat of the school's main rhythm. In keeping with the head of discipline's earlier observation, students' sense of ownership and participation in organising and coordinating events in the school may have contributed to the relative lack of resistance to the school's disciplining structures and expectations, and a concomitant acquiescence to the school rhythm.

Further evidence for this was found in the school's recently revamped non-gendered hair policy, which had been reported in a local newspaper. Both the head of discipline and another teacher stated without prompting that the recent protests in schools around the country regarding language policy, codes of conduct and uniform had caused tension between staff and teachers at School A. This tension precipitated change in the school's approach to discipline⁵⁹; when asked his advice for his successor, the head of discipline responded,

The last few years have been a big learning curve for many of us, because lots of changes needed to be made and we made them ... and lots of us felt 'well school discipline is going to go down and things are going to deteriorate'. In fact, it's been just the opposite. We've got more buy in from pupils, and in some ways the school has become... I mean things like uniform have become easier to manage. So I think: be open, be open to change.

School A Head of Discipline

⁵⁹ This period of change was also evidenced by the principal's address in the school magazine for the preceding year to this study.

7.2.2.4 Substance abuse and conflict

The types of discipline issues described thus far (late-coming, lesson transitioning) have involved students not complying with the school rhythm. A different type of discipline concern involves students actively disrupting school rhythm: examples of these include student substance abuse and associated behaviours, or physical conflict—either between students, or between students and teachers.

One such discipline issue arose on three occasions during the first term at School A: students' use of prohibited substances. Students were repeatedly warned during assemblies about not using illegal substances, but the issue mostly arose through out-of-school incidents, or students bringing substances such as alcohol or marijuana to off-timetable events e.g. orchestra weekend or athletics day. In particular, students were warned about being under the influence while elsewhere, and how this might bring the school into disrepute: School A's principal was keenly aware of the symbolic capital tied up in the school's reputation and the importance of this for sustaining its position in a marketized field.

While the head of discipline said the school did threaten to conduct routine urine tests (as allowed in the SASA), this was done, he said, with the view of supporting the student rather than punitively. Despite what he described as a relatively regular occurrence of such concerns, *they never interrupted the school rhythm* and students were not under the influence while at school during normal lesson hours. School A also had sufficient support staff in the form of both a school counsellor *and* a full-time clinical psychologist to provide the necessary pastoral care for students in such situations, alleviating this burden from teachers. Student substance use did not disrupt rhythms of teaching and learning.

The absence of physical conflict at School A was also noticeable during the observation period. There were no instances of playground fights, corporal punishment or student-on-teacher aggression during the study. What conflict did exist was dealt with through the discipline system in place.

A less obvious mode of sustaining rhythm, both materially and socially, was the school's infrastructure. The next section describes how infrastructure—both in qualities and quantities—related to the observed everyday timespace-lived in School A.

7.2.3 Infrastructure conditions: material meets social space

The condition and design of School A's infrastructure interacted with the school rhythm in multiple ways. Maintenance itself constituted a rhythm, one that was visible from the first day of term. The team of cleaners, janitors and handymen were at work throughout the school, adding to the general soundscape (see "Timespace-perceived"): the tones of weed-eaters trimming lawns and wood being sanded contributed to the audible soundtrack in the corridors.

The principal at School A cited the 'broken windows' ethos as the approach towards maintenance in the school:

Principal: (I)t's also the whole 'broken windows' theory as well, I mean, you don't let things deteriorate. As soon as something needs doing you fix it. Straight away.

Interviewer: That must demand quite a maintenance budget as well though? I imagine you have a significant...?

Principal: Mm, ya, but we don't have that. 'Cos hardly anything is broken. But even if something is lying around, it's not left there. If something's spills on the floor, it's not left there, it's cleaned. **But it's not something that we concentrate on doing, it's routine. That's the way it is.**

Underlying this 'common sense' approach is the significant economic capital School A musters towards its inflated maintenance crew (see Chapter Five). That senior management can (literally) afford to 'not concentrate' on such things is evidence that the rhythm of maintenance (the 'routine') can be delegated and branched off as a parallel rhythm that underpins teaching and learning, only becoming visible when *not* functioning as required. For example: one incident occurred during observations where a white substance was spilt in the middle of a busy corridor outside the staffroom. Its effect on rhythm was noticeable as people needed to navigate around it, causing turbulence in the movement through that space. In keeping with the principal's espoused philosophy, the spill was cleaned within 20 minutes.

The eurhythmia of infrastructural maintenance formed a foundational tempo that kept spaces and facilities throughout School A maximally available for use for teaching and learning activity. Rooms, fields, labs and halls were never 'off limits' due to maintenance or repair issues. Even in severe drought conditions, when the city was anticipating the potential scenario that taps might run dry, School A was prepared. Located in one of the highest rainfall areas in the country (geographical location as capital), School A sourced groundwater for its fields and grounds, at a time when other schools were shutting down

their sports circuits due to pitches and fields deteriorating. In addition to this, the school had a mutual agreement with the adjacent office park whereby the office occupants could utilize the school's squash court facilities in return for the school accessing the groundwater pumped from the office's basement parking complex. Social capital combined with tradable infrastructure (economic capital, in the form of desirable sports facilities), and School A fortified itself against a looming disaster that threatened the economic and social welfare of the whole of Cape Town. At no point did School A need to reduce its number of running taps.

The head of maintenance at School A also stated that the school's philosophy was one of quality over cost (especially for larger projects) and that the maintenance team were always thinking significantly ahead regarding the infrastructural requirements of the school, including drought-proofing the site. Such priorities and horizons are only possible in the presence of ample economic capital and stability for planning to bear fruit i.e. fortification.

Daily maintenance of, and capital investment in, infrastructure hence formed two rhythms of different periodicity that supported teaching and learning in the background of the school's timespace.

Material space not only enabled rhythm through maintenance and availability. The *design* of the school space enabled relatively smooth flow across the site. School A's buildings were spatially distributed across one end of the school site, with open corridors and multiple access points distributing the flow of people diffusely across the space. That is: during transitions and break times, students were spread out relatively evenly throughout the school, with few bottlenecks that interrupted flow.

7.2.3.1 Storage

One aspect of infrastructure which was given attention throughout the field work for this study was the nature and location of storage within schools (see Chapter Five)⁶⁰. The movement of objects through school timespace shaped rhythm as much as the movement of bodies.

⁶⁰ This focus was borne of personal experience working in schools without sufficient storage, and the effects of this on daily rhythms of teaching and learning.

School A had significant storage capacity, distributed across the school site (see Chapter Five: "School A: Non-teaching spaces"). To recap, these included: a large reprographics room, which stored unused paper, worksheets ready for collection and printing equipment; a costume and wardrobe room for theatrical production equipment; basement archive space; basement storage of cleaning materials; an outside double volume area for storing building equipment and scaffolding; a workshop for tools and machinery, and storing materials for maintenance; a lost and found room for students' belongings; ample storage for chairs and orchestral equipment both under the main hall stage and in a parallel panelled-off room adjacent to the hall; a book and uniform storeroom-cum-shop; a storeroom on the hall gallery for lighting and sound equipment; storage in the staff work area for subject-specific LTSM (the 'carrells'); lockers for staff in the staffroom; lockers for students in the corridors; a computer storeroom next to the computer lab, a sports storage chamber beneath the spectator seating in the sports hall, and; walk-in storage for tools and materials in each specialist art classroom. These were in addition to the usual cupboards for teachers in classrooms.

The upshot of all this storage capacity was that objects and materials were on hand when required, ensuring that School A could store materials appropriately (and hence preserve their value, whether these were laboratory chemicals, sports equipment or student assessment scripts), and that activity and rhythm were not interrupted by lack of access to the objects required.

However, such material facilities are not capital in the absence of personnel to manage them. In School A's case, ample non-teaching staff were available to organise and curate these storage spaces, ensuring their maximum availability (the science lab technician, the maintenance team, the finance staff, the receptionist who managed the bookstore, the part-time teachers who also maintained the school's computer facilities, the full-time reprographics manager), meaning that this organising work did not fall to teachers. Throughout observations at School A, struggles for access to objects and LTSM were *absent*, but the **use** of these objects and materials was constantly present.

The only distribution issue for storage at School A was for students. When students were observed in the corridors during lesson time, they were primarily either transitioning to a one-on-one music lesson, or fetching a required object from a storage locker.

This maldistribution of student storage space was a non-problem for two reasons. Firstly, the habitus of students and the rhythms described under "Rhythms of discipline and dressage" meant that students were often prepared for the class, and that, in the

exceptional case that an object was forgotten, students exhibited urgency to obtain the required object and return to class quickly.

Secondly, students would often leave their belongings—unattended—in collections in the hallways outside their classrooms. These belongings included sports bags (that could not fit into lockers), items of school uniform... at one moment a student was witnessed running to fetch his calculator from a tog bag lying in a corridor. At any point during observations in School A, the volume of students' belongings in the corridors (placed so as not to obstruct flow) were a constant presence throughout the site. Students were able to do so because the school site was considered safe and secure. Further investigation suggested the eurhythmia of School A was enabled by the absence of internal security. That security was not required at School A became an issue of interest.

7.2.3.2 Security

Security as a feature of a school is not immediately obvious as relevant to timespace. However, security is primarily about the flow of bodies and objects through space: the more need for access control, the more time it takes for bodies and objects to move. Securitisation of a school shuts down the flow in the school, creating a different rhythm to that which would be possible if people and objects can move freely where and when they are required.

The openness of the School A internal space was striking. Classrooms were left open and unattended by staff, even with desktop computers, laptops and projectors installed in most of these. Students' belongings were left in corridors. The staff could leave their smartphones unattended in the staff computer room to charge. Computer rooms, libraries and other specialist spaces lacked access control. Students and staff were all free to flow within the school grounds without encumbrance.

School A did have CCTV cameras installed throughout the grounds, including the sports fields (where cameras were used to detect late-coming after break or truancy). Despite this, both the principal and the head of discipline were emphatic that security was not an internal concern, and that on the rare occasion when internal theft was suspected, investigation found the issue was forgetfulness or the misplacement of items, not stealing.

Teachers also believed that their classrooms were safe when unattended. While conducting rounds to gather data for timetable adherence, additional information was noted regarding the 'openness' or 'closedness' of the teaching rooms in the school. From that data, empty *and* open classrooms were observed 148 times in the week. Music rooms (with equipment)

were also left open on 50 recorded occasions. Before school, open classrooms were frequently observed with students and no teacher. Throughout the term, the whole school site was accessible to all within it.

The only exception to this rule was that the staffroom was off limits to students. One teacher recounted an incident where a student had accessed the staffroom after hours and taken a test script. The script was then distributed prior to the writing of the assessment. This incident resulted in secure lockers in the staffroom being used to store tests and assessments. Bar this instance, theft internally within the school was not a consideration.

Whole site access: material space and dressage

Security for School A was far more of an external threat. As an old school, the site had developed piecemeal over several decades. Multiple entrances made the school boundary—particularly at the beginning and end of the school day—porous. In the words of the head of maintenance:

Security, that ... that is an issue. Because the school has developed piecemeal over 60 years, we have a number of entrances which we can't really change. So, if you go to some of the schools in the area, they have one entrance and one security guard, but at 3 o'clock when we open our three or four entrances for students to leave, the school is quite vulnerable. So we have upped our security and it is costing us more money, but I think in the future that is going to be a big challenge, because we have people coming on site, we're a soft target, um, stealing stuff out of offices and from pupils' bags and that sort of thing, so ya, it is a big challenge.

Interviewer: It's not an internal issue at all?

Head of Maintenance: No, it's an external issue.

The head of maintenance attributed the porous boundary to piecemeal development. However, the need for multiple entrances could also be attributed to the transport mode of the vast majority of the students at the school: multiple entrances maximised access for parents (in private vehicles) to fetch their children without causing excessive blockages in the surrounding streets (As discussed later, School B had only one entrance for more students, but this was sufficient due to students' use of public transport).

To manage this porosity, School A had specific rhythms at the beginning and end of the school day. On several occasions, the routine of opening and closing the school perimeter was observed: starting with the access points on the main road, a specific member of the maintenance team would unlock and lock the gates in sequence. All four entrances were open for approximately half an hour prior to school and twenty minutes after school, during

which this member of staff would monitor the main student access point. His circuit to lock and unlock took him approximately ten minutes in total. Outside of these windows, only one gate was open to the public, which led to a front garden and the access-controlled reception entrance where guests—and late-coming students—had to request entry. These rhythms hence doubled in function to manage late-coming students, and contributed to the school's spatial restriction of student movement into school once lessons had begun.

The bulk of School A's site, including gardens, fields, tuck shop, and quads with student seating were all contained within the locked internal perimeter of the school and were not accessible from the main (open) gate. Student flow between classes and break all occurred within this internal perimeter, and the front garden was not contiguous with other spaces used for break and sport (the relevance of this will become more apparent when we consider School B's infrastructural arrangements and the effects of this for student dressage and security). School A's internal activities throughout the day could continue sheltered from external interference.

7.2.3.3 Digital and reprographic technology

A third aspect of school infrastructure that shaped rhythm was digital and reprographic technology. In addition to the rhythmic flow of bodies and the flow of objects around the school, such technologies enabled the flow of *information*.

Digital technology

School A had wi-fi available throughout the school, accessible both to staff and students (at one point in an assembly, a deputy reprimanded students about creating wi-fi hotspots which overloaded the school network). Most classrooms were fitted with digital projectors, and some had computers. The school governing body had also taken the decision to supplement teachers' private devices to the cost of R5 000 per teacher, in order to make laptops for work-use more affordable (these devices would not be the property of the school but would belong to the teacher, who was then responsible for maintenance and insurance of the device).

Digital *pedagogy* was not, however, a priority at the school. The principal felt that connectivity served more administrative ends and that e-learning was not necessary for producing good results. For administration, staff communicated about events and issues using a popular school software application ('*Staffroom*') and students were expected to use anti-plagiarism software (called '*TurnItIn*') when submitting written assessments.

The utilization of such technology was premised on the whole school community having the required form of cultural capital in the form of digital literacy, as well as access to the material conditions for use, namely digital devices, at school and at home.

Reprographic technology

Although the differentiation between digital and reprographic technology is a debatable one, the separation serves to distinguish between computers, smart devices and internet connectivity and another type of machine-based technology which also supported School A's rhythms of teaching and learning: photocopiers and printers. Reprographic technology converts digital information into hard copy.

School A had an abundance of reprographic infrastructure which was available for use by teachers across the school site. In addition to the bulk copying and printing done by the designated reprographics manager, most offices had copier-printers for teachers to access, and several of these were colour-capable. Hard-copy print-outs and photocopies were highly visible on notice boards across the school site, and coloured paper was also used to differentiate between categories of notices. Although the *Staffroom* software was used to disseminate information to teachers online, most notices were also available in printed form on the staffroom notice boards, which were up to date and maintained⁶¹. The dissemination of information through timespace in School A relied on these technologies. Much of this information was of a similar nature to the verbal announcements in assembly: event X at time Y in location Z.

School A could ensure its eurhythmia not only through selecting the appropriate habitus of the school staff and students (dressaged back into conformity when necessary), and removing material barriers internally within the school (supported by ample organised storage and lack of internal securitization), but also by ensuring readily accessible *information* regarding activities in timespace, in both digital *and* print formats.

This chapter has thus far explored how School A's timetable set and sustained the rhythm of teaching and learning in the school, how the elasticity, granularity and modularity of the timetable made close adherence to this rhythm possible, and how rhythms of teaching and learning were supported by *other* rhythms that enabled the flow of bodies, objects

⁶¹ Throughout the data collection period, only one out-of-date notice was observed.

and information. These supportive rhythms were constructed through the forms of capital School A had available.

The last section of this discussion of School A's timespace, and the rhythms within it, examines timespace-*perceived* by the staff and students within the school, and how this subjective experience might have contributed to their acquiescence to the timetable's tempo.

7.2.4 Timespace-perceived: subjective experiences of teachers and students

The beginning of this thesis framed the research interest as the relationship between structures, meaning and activities in schools, and how access to differentiated forms of capital shaped distinctions between schools that sustain success (fortified) and schools that struggle to do so (exposed). The timetable has been explored as the axis of this translation, by combining capitals and advantage to produce—and reproduce—rhythms of teaching and learning.

The subjective experiences of these rhythms amongst both teachers and students—i.e. their timespace-*perceived*—does not determine these rhythms. Timespace-*perceived*, however, does contribute to the synchronicity across the school through participants' acquiescence to—and comfort with—school rhythms. As Bourdieu described, an appropriate *fit* between habitus and field generates a transparency to practice akin to the ease of breathing, and a synchronised habitus and field mutually co-construct and reinforce each other's logic as natural and 'best'. Conversely, *misfit* generates alienation (Strand & Lizardo, 2016), a subjectively negative experience of practice.

As described in Chapter Three, in rhythmic terms, habitus-field *fit* aligns with eurhythmia, and *misfit* with arrhythmia i.e. mis-timing. This last section discusses what evidence was present for teachers' and students' sense of fit or misfit as they experienced the timespace-lived of School A, and how these relate to the material and social space of the school.

7.2.4.1 Material space aesthetics

Much effort had clearly been put into making School A a pleasant space for staff and students. School A's maintenance went beyond raw functionality. The school itself was clean and neat; the site was full of trees, with fountains in the quads and well kempt gardens. Internal walls were clean and graffiti free, with different colour-coordinated zones.

The head of maintenance was also the senior art teacher in the school, and was concerned with the aesthetic feel of the site. Most of the school's walls were adorned with students' artworks, which were updated regularly. The effect of this wall adornment was a sense that the space belonged primarily to the students.

Significant creature comforts were in place for staff. The staffroom was fully stocked with crockery and cutlery for use, tea, coffee and milk (of multiple varieties) always accessible, a staff fridge, water cooler, fans, soft seating, and a satellite linked flat-screen TV on which many staff watched news or sports during their breaks. During the second break of each day, the kitchen team would serve a lunch of sandwiches for all staff, which included juices and a wide range of condiments (a strategy that effectively *saved* time for staff and negated the potential conflicts inherent in communal fridge space and stolen food). The staffroom décor was dated, but clean and functional, and the room itself had large windows to admit natural light and a generous collection of well-tended plants.

The school library was also an inviting space, with soft cushions, bean bags and sofas. New titles and age-appropriate texts suggested an up-to-date book collection, and the front display was curated with recent new additions. Titles on offer included a broad variety of classic literature (including Africana) as well as graphic novels and comic books.

Between the vigilant maintenance described in the previous section, the freedom of movement, and the artwork throughout the school, the aesthetic of School A appeared to an outsider as inviting and safe, and seemed to prioritize the comfort of the school community.

7.2.4.2 The soundscape of the school

In addition to the visual aesthetic, the soundscape of the school provided a useful angle on the rhythm of everyday activity beyond what eyes could see. In general, sound throughout School A exhibited a sense of calm and ease. The school was a constant low hum of activity: students talking, teachers talking (mostly lesson delivery), maintenance activities, music lessons, the sound of sprinklers and the fountains, birdsong and—on

occasion—recorded music and videos from lessons or (before school) emanating from the prefects' room. Drama lessons were also louder than usual, and the history classrooms often played YouTube videos on loudspeakers. Two notable absences marked the soundtrack of School A: no bell, and no teachers shouting.

Students themselves were talkative at break times, but rarely shouted or screamed (with the Valentine's assembly being an exception). When moving between classes, or to music lessons, students were for the most part relatively quiet. That is: the soundscape rhythm of the school also conformed to the timetable. As described in Chapter Five, it was the soundscape *arrhythmia* between the main school timetable and the more exposed music department timetable that precipitated a solution forged with material space: the new music building.

7.2.4.3 Staff sentiments about School A

School A was not without stress or conflict. For all the aesthetic efforts and eurhythmia described, the pace of the school rhythm was fast and the pressure to produce results was high. Observational evidence suggested a mix of subjective experiences amongst the staff.

Very little direct conflict was witnessed. One argument between staff was observed in the music department, which was directly attributed by the staff member in question to the stress of a constantly changing satellite timetable (see Chapter Five) and the lack of appreciation by a colleague of this difficulty.

In the staff meeting observed, the principal mostly allowed staff to run the agenda without interruption. Of interest to this thesis was one teacher's response to collecting payments related to the off-timetable athletics event described earlier. The teacher refused to be responsible for chasing payments on the finance department's behalf. Her refusal in this regard was not challenged, but considered a legitimate defence of her own priorities by both senior management and colleagues. Again, teachers' focus on teaching and learning was unadulterated by extraneous administrative tasks.

Tight for time

Almost all negative sentiments expressed by staff were in response to feeling pressured regarding their time. For example, staff were enthusiastic in principle about isiXhosa lessons for teachers, but cited lack of time as a barrier. When asking about the focus of this study, another senior teacher stated that timespace is a fundamental stressor for teachers: he had not had stable rooming for eight years and said, "you can't teach properly

like that". The timetabler had also expressed enormous respect for those P1 teachers without stable rooming, stating that one of the best arrangements he could give a teacher was their own classroom. Despite room sharing being collegial at School A, it was acknowledged amongst the staff that roaming (i.e. being without stable rooming) was stressful and more difficult than having a home room.

A little later in the term, this same teacher entered the staffroom irate: "Can't keep coming to all these meetings! We're teachers! This is the fourth meeting this week!". Another part-time member of staff the previous day also expressed distress at the pace of the school's rhythm in the staffroom, saying "Things are never stable, things are always changing: I can't keep up!". The head of the English department described this general intensity thus: "We consider ourselves a pressure cooker—everyone must take that on board".

Teachers' sense of time-pressure was substantiated by the volume of activities they engaged in. All teachers were expected to assist with sports and clubs in some manner (although outside coaches were also hired to assist), and the school was a hum of activity late into the night and on weekends. Despite this, the pace of learning was able to keep up with an intense curriculum, plus extra (due to unbundling subjects), and the school organised multiple additional outings and events: time for staff at School A was indeed pressured.

But absent from their burden were significant school administrative duties, large volumes of disciplinary activities, assessing classes of 40 or more students, or the obligation to provide extra lessons for struggling students (School A did not allow ordinary staff to do this, claiming that it created disparities in opportunities for students). That is: staff could consistently concentrate their energies on curriculum or extra-curricular activities.

Collegiality

Beyond the incidents described above, the majority of staff interactions and experiences witnessed were calm and collegial. Most staff participated in the shared meal at second break each day. The staffroom often contained teachers chatting or joking, reading a newspaper or watching a moment on the TV between lessons. Staff also felt free and at ease to step out of their classrooms mid-lesson to retrieve a forgotten worksheet, or to fetch a glass of water, knowing that students would self-regulate in their absence. More than one teacher expressed a deep appreciation for the stability and predictability of the school, as compared to their experience teaching elsewhere, and senior teachers signalled an awareness of the relative advantage School A enjoyed.

7.2.4.4 Students' sentiments about School A

While some observational evidence suggested that students had a broad range of experiences of School A, the main focus for this study was on how student timespace-perceived manifested as supportive of—or resistant to—the school rhythm.

The description of detentions earlier suggests that a small but significant proportion of the school's students did on occasion find themselves at odds with the school's rhythm. Vignettes also alluded that students were aware that the balance of power resided with the school. Students would rush to class to avoid being disciplined for late-coming. On one occasion, a student returning from music class waited outside his isiXhosa lesson for his classmate to finish her oral presentation before entering and disturbing. Students exempt from language lessons due to their nationality would work in the library or outside, self-regulating and not disturbing other classes. Extra time gleaned from absent teachers or other moments was mostly used for studying and homework. While they certainly were not absent, no incidents of conflict or antagonism between a member of staff and a student were witnessed that disrupted the rhythm of a lesson or activity.

But the students also seemed to enjoy those aspects of the school that were attuned to them: the new hair policy, the variety of activities offered, the wall decorations, the school production, the Valentine's assembly, and the spirit-building athletic event. As described earlier by the head of discipline, accommodating minor preferences for the students had built better solidarity between teachers and students on issues that mattered by removing antagonism around peripheral concerns such as uniform and hair. Such solidarity was, according to the Grade 8 Head, further developed through out-of-class activities in School A's broad extracurricular spread.

7.2.5 Fortified or exposed? Repetition and difference

Lefebvre described rhythm as repetition *and* difference. Rhythm is not mechanical lockstep, but more organic: a common refrain, punctuated with variations, but which always returns to the main motif.

School A deployed its substantial access to various forms of capital effectively to set up a eurhythmic tempo through its timetable. Deviation from the timetable was not avoided, but carefully and pre-emptively managed. Teaching and learning was paramount, and the polyrhythmia of maintenance, discipline and administration of the school wove around the rhythms of teaching and learning, ensuring maximal fluidity of bodies, objects and

information across the school's timespace, and the minimisation of distractions and sources of conflict.

As previously hinted in Chapter Five, School A recognised that eurhythmia was built from a core of stability and a surface of adaptability. Knocks or changes that could affect the core rhythm of teaching and learning were anticipated and mitigated or avoided, using the capitals available to fortify the school against excessive vicissitudes, even drought.

A common theme that strengthened throughout fieldwork in School A was about *who* got to set the beat: the school (i.e. the staff and senior management), or the students. School A's field position, its strong traditions, dressage procedures for newcomers, high expectations and track record of producing highly prized symbolic capital for its students enabled the school to set the pace, rhythm and agenda of activity, and students complied.

Students who repeated or failed at School A were extremely exceptional: the movement of students from Grades 8 to 12 was in keeping with the envisioned monochronic age-cohorts of the NPPPR and AOPS. In general, School A's rhythm was productive of symbolic capital in the field of the education system, and the advantage conferred by this productivity was reproduced every year through how the school turned capitals into rhythms into results via its stable and reliable timetable.

The analysis now turns to School B, detailing the same categories of rhythm, deviation and flow as described for School A.

7.3 School B

Throughout the observed academic term, School B's rhythm of teaching and learning was stable, but precarious. The following section details the form of this precarity, its effects, and its relation to rhythms of discipline and material space along with their roots in the school's available capitals.

7.3.1 Rhythm intended and rhythm enacted: timetable adherence

School B's timetable was only partially reliable as an indicator of activity. Appendix A includes a detailed data visualisation, indicating School B's actual activities over a four-day period in the middle of the term (unfortunately one day was missed during data collection—see Chapter Four).

As was the case with School A, the infographic describes adherence to the timetable as intended, with green squares representing timetabled lessons and white indicating unused rooms. As mentioned in Chapter Five, room sharing was far less common (dark green) at School B, with teachers being reluctant to use each other's space, or yield their own due to security concerns (see "Substitutions" and "Security"). The few dark green squares on School B's infographic indicate teachers without a home room, of which there was one P1 teacher, one head of department and the principal.

Room swaps occurred at School B (yellow), but rarely between normal teaching classrooms. Far heavier use was made of the halls and seminar rooms (of which there were three), with one being permanently allocated as a senior teacher's classroom. Heavy use was made also of the hall foyer, a passage space residing between the main reception area and the main student entrance of the school. (This student entrance was nicknamed "The Intersection" during fieldwork due to its tight concentration of student movement through an architectural bottleneck in the school: see "Whole site access: material space and dressage"). While at any one time there were rooms not in use at School B, these were often not available due to spatial brittleness (see "Security").

Creating the data visualization for School B required introducing different colours not needed for School A. The dark maroon cells on the infographic indicate teachers who have been called out of their lesson for another legitimate duty, including resolving a physical

altercation between two students, or a parent unexpectedly calling on the school to discuss an issue⁶². This is discussed more in detail under “Deviation by default”.

The second colour introduced to accurately portray School B’s timespace-lived was red. These cells indicate lessons that did not happen at all. Those cells coded red with an X indicate groups of unattended students being supervised in the school foyer where senior management could ‘keep an eye’ while still going about their other activities and duties.

Of the 815 data points⁶³ collected over four days, 72% were *exactly* in keeping with the timetable. If minor deviations are included (i.e. a room swap or substitution), then the timetable was adhered to for 98% of lessons. The remaining 2% were teachers being called out of lessons for other responsibilities, lessons not happening due to substitution confusion, or simply insufficient staff to cover all lessons. Successful substitutions made up 5% of the total number of lessons coded.

The implications of this 2% of unintentional lost time, and the (relatively) higher substitution burden will unfold as the rhythms of School B are explored.

7.3.1.1 The start of term: establishing the timetable as the axis of rhythm

The four days described on the data visualization occurred in the middle of the term, by design, to snapshot ‘peak rhythm’ without interference from start and end of term activities.

But School B struggled to reach peak rhythm as the term developed. Despite planning starting in September of the previous year, last minute changes to the timetable had to be made. One staff member who was due to start in the new year was suspended by the provincial department pending an investigation and hence never arrived. In addition to this, three other teachers were unavailable for various reasons throughout the term, two of whom did not return.

⁶² School B’s geographical relation to its student base, combined with parents’ general low socioeconomic means, meant school visits were onerous for parents and not easily reschedule. That the temporality of the parents’ habitus was also out of sync with the school’s schedule further supported the sense of ‘mis-firing’ between the ideal timespace of formalised schooling and the timespace-lived of the students—and their families—of School B.

⁶³ The large discrepancy in room-lesson ‘units’ between the schools is a function of School B’s coarser lesson granularity and far fewer number of rooms. School B had a maximum of 6 lessons a day, whereas School A could have up to 11 half hours. School B had 43 rooms to code (teaching rooms and halls) and School A had 51 (excluding small music tuition rooms) or 60 (including music rooms). Finally, School A had the full 5 days of data, whereas School B had only 4. See Chapter Four for more details on the challenges of data collection at School B.

The timetabler at School B spent the first few weeks frantically trying to get the timetable to settle, reaching version 42 of the schedule before arriving at a new stable arrangement. While this rearranging unfolded, the day's timetable was communicated to teachers in the staff meeting before school. Four weeks into term, clashes still caused challenges, as multiple classes would arrive at the same room at the same time—at one point the head of maths was observed running both classes (approximately 70 students) who had arrived simultaneously, with several students spilling out into the corridor due to lack of space in his classroom. The timetabler described how the *Time-Design* software kept producing unacceptable timetables due to staffing arrangements being tight (See Appendix E).

7.3.1.2 Deviation by design

Administration at the start of term

During the first eight days of the term, the whole school was partially off-timetable by design. Students were given pastoral 'register' classes in the mornings while the lessons for the day were confirmed and communicated. Grade-specific assemblies were conducted to convey the school's expectations for the year (see "Assembly"). The instability of the timetable at this point meant that the timetabler was moving around the school ensuring all teachers knew where they should be and what lessons were on for the day, as well as resolving clashes that had arisen. Bar this uncertainty, the assemblies and unusual schedule were similar to that of School A.

Lessons began, but several teachers were partially unavailable due to administrative work. Some were sorting lists organising students into new class groups in response to lost staff. One classroom was unavailable for lessons as it was the book store-room over the December vacation. A senior teacher was busy for the best part of the first two weeks sorting, cataloguing and distributing textbooks, with the assistance of two students, and the Grade 8 Head. Based on the timetable, these two teachers had a lesson load of 73% and 71% respectively. The deputy in charge of finance later described how the school struggled to get students to return textbooks at the end of the year, making book organising for the next year a challenge.

School B ran daily staff meetings for 40 minutes each morning prior to the start of school, a new arrangement put in place with the new 08:30am start for the day. At the beginning of the term, these meetings included discussing and delegating administrative tasks, with conversation at times becoming conflictual (see "Teachers' sentiments about School B").

Significant off-timetable events

Three deviations by design were witnessed during the first term: two sports events, and deviations for assessment. An intra-school athletics day was held on the second Friday of the term, to select students to represent the school at an upcoming interschool athletics gathering. This took the whole school off timetable by design for the day.

The later interschool athletics event occurred on the 14th of February, where the athletes went in hired coaches to a large public stadium in the city to compete against other schools from around the metropole. Senior students (Grades 10, 11 and 12) were also invited to join the sports teams and provide support during the event, although supporters had to pay a fee to cover the additional coach hire. Junior students not participating as athletes remained at school for the day, with classes collapsed into arrangements that made use of those teachers not attending the sports event i.e. even though the whole school did not attend the event, all grades were off timetable due to teacher availability.

Assessment

School B's timetable was enmeshed and not modular (see Appendix B). Bar language offerings and FET electives, subject-grade combinations were scattered across the day, making synchronised assessment impossible without deviating from the timetable. As a result, School B had to design a separate assessment schedule that augmented the existing timetable in order to synchronize subject-grade cohorts together for tests.

Deviations for assessments began in the 8th week of an eleven week term, but did not take the whole school entirely off timetable: rather, the head of academics responsible for assessment selectively swapped or replaced certain lessons as required. These deviations only finished in the 10th (penultimate) week of term i.e. three calendar weeks were required to ensure that all combinations of subjects got tested, including the senior students' electives. Finishing with a week to spare was necessary to allow sufficient time for marking prior to reports being distributed, and for 'mopping up' students who had missed assessments.

The rationale of a piecemeal assessment rhythm stitched into the main timetable (rather than a whole-school 'test week') was to avoid the lost contact time that results *after* assessments are complete. The academic head of School B explained that students would not return to school after a dedicated 'test week', and attendance issues resulted in significant lost time for teaching and learning. By spreading the assessments out in between other normal lessons, teaching and learning could continue.

Venue rental

The final type of timetable deviation-by-design that was witnessed at School B was venue rental. Occasionally, the school was approached for venues during the school day (most rentals took place after hours and on weekends). Given the inelasticity in rooming, this would displace a class, or exclude a hall for lesson use. Such events were observed twice—for a single day in each case—during the term.

While School B renting out teaching and learning venues during the school day clearly poses ethical questions, this study rather aims to frame such decisions as dilemmas, seeking to understand the circumstances that led School B to face such a trade-off in the first place. The loss of a classroom for a single day seems a small inconvenience if a school is struggling to pay its staff and the rental funds might secure a teacher's pay cheque. But dilemmas of this nature erode the primacy—and interrupt the rhythm—of teaching and learning.

The timetable, then, spluttered into rhythm over the first four weeks of term, only to be punctuated again by assessment changes for the last four weeks. Throughout the term, the deviations were mostly planned on a day-by-day basis to try and contain ripple effects, but the result was that the main timetable was not a reliable source of information about schooling activity for a large part of the observation period.

7.3.1.3 Deviation by default

Like School A, most of School B's unintended deviation was due to staff absence, although timetable clashes also contributed significantly in the first four weeks while the rhythm settled. Other minor deviations involved missed substitutions and teachers needing to be in two places at once.

Substitutions

In Chapter Five, analysis of the staffing elasticities in the timetable at School B suggested that at any one moment in the school, approximately seven to ten teachers (excluding the principal) were free (see Table 5.2). Excluding deputy principals reduced the number of staff available to between five and eight. This number was further reduced by the progressive loss of three teachers throughout the first term, on top of the tighter timetable already resulting from the no-show of a teacher scheduled to arrive. At the time of producing data for the visualization, one of the three had already departed. The other two left soon after.

School B's coarser granularity also meant substitutions took the whole period (unlike School A, where back to back half hours meant substitutions were often shared between two teachers).

A free period at School B did not necessarily mean protected time for teachers: in addition to being permanently on substitution call, those not teaching in the first period of the day would also be allocated to the latecomers duty roster, when they would use their non-contact time to monitor and invigilate large numbers of students arriving late to school (see "Rhythms of discipline and dressage"). At one point one of the grade heads remarked that he'd had every free that week taken by substitution or late-coming duty (in addition to which he had significant pastoral responsibilities due to his position).

Bar the three teachers previously mentioned, at any one point in the observation period, School B had between one and three teachers absent due to illness or other circumstances. This rate is comparable to that of School A, which had between one and four absent teachers for various reasons, but also had a much larger staff contingent.

Like at School A, teachers on substitution duty often continued with the work they had intended for the period, whilst keeping an eye on students. But substitution at School B was a fraught rhythm, with students moving to the substituting teacher's home room, rather than being invigilated in situ. This caused attrition and turbulence as large groups of students moved across the site—see "Rhythms of Discipline and Dressage".

Failed substitutions

Several of the missed lessons (red) visible in the infographic in Appendix A were the result of missed substitutions. Since any free could be a substitution, teachers could not reliably predict their duties, and at times simply didn't know they were supposed to be doing substitution. In the instance of absent teachers due to late-coming (see "Transport") the school administration was sometimes also not aware and could not inform the appropriate teacher. Communication around substitutions was highly charged and erratic and teachers resented losing their few free periods (see "Teachers' sentiments about School B").

Split responsibilities

One marked issue at School B (which did not visibly arise at School A) was teachers being split between two responsibilities during lesson time.

School B's reduction of daily break time to one 40 minute window (which also included break duties for staff) meant that any administration or pastoral work that required student presence could only be conducted in this time, or during free periods. As substitutions began to mount throughout the term, teachers with additional responsibilities—most notably grade heads—were at times needing to attend discipline issues or consult with parents while timetabled to be teaching. Some examples of this include: the deputy Grade 9 Head attempting to investigate a fight after break in which a junior student was assaulted by several senior students; the academic Grade 9 Head being called upon for no less than 11 parent visitations in one day; and the Grade 11 Head spending several hours on the phone to contact parents about behaviour and academic concerns.

While it is debatable whether, on a case by case basis, teachers made the appropriate decision to leave their classrooms temporarily to complete other duties, two complexities arise as barriers to normative evaluations: one methodological, and the other a professional dilemma (akin to the room rental). Methodologically it was next to impossible to detect when teachers made the alternative decision—to stay in their class despite being called to another location in the school for something else. But in addition to the absence of visible 'stay' choices by teachers in such dilemmas, the absence of similar binds in School A raises the question of why School B's teachers were ever confronted with such choices. Staffing *in*-elasticities generated asynchronous rhythms such that different responsibilities competed for the timespace available, and at times clashed. Contradictory forces of this nature are more indicative of an *arrhythmia* in School B related to constrained forms of capital, and the resulting precarity of the teaching and learning rhythm.

7.3.1.4 The end of term

The final week of term saw very little teaching and learning take place. Teachers were grading assessments intensely to have marks complete (assessments had only been finished by the week before) and student attendance was markedly reduced, making covering further curriculum difficult. This relation between student absence and lack of activity at school presents the school with a catch-22: to continue classes means to risk leaving a significant number of students behind, with content needing to be caught up again in the next term; to suspend classes sends the message that absence is condoned.

In addition, large class sizes meant that assessment was a more onerous activity for School B, a fact that combined with few free periods to swell marking work well into teachers' personal hours. One teacher remarked that he'd been grading papers until 2am, and this claim is not unfathomable given the numbers examined in Chapter Six about hours to assess students' work. Given that School B's students were academically underprepared and often came to secondary school with learning backlogs, the school seemed to have opted to allow teachers to grade assessments at the end of term⁶⁴ and to pick up teaching and learning again once students returned in the new term.

As was the case with School A, the veracity of timespace-lived to the timetable, as presented in the data visualisation for School B, obscures transition time. The next section discusses how students and teachers moved about School B.

7.3.2 Rhythms of discipline and dressage

The rhythm of movement to, from and around School B can only be described as arrhythmic and at odds with the rhythm of teaching and learning set out in the timetable. The origins of this arrhythmia were the unreliability of the timetable, the habitus of students as well as the spatial qualities of the school, both in architecture and in geographic location. Efforts to dressage students into more school-conducive temporalities were often overwhelmed by the scale of the problem, and the volume of effort required from time-pressed teachers to consistently implement disciplinary processes.

Discipline presented a form of work intensification for all the teachers at School B. Weekly teacher duties included: monitoring late-coming in period 1; surveillance across the school grounds in the morning, at the main school gate, as well as at the nearest bus stop where students would alight and walk to the school through the surrounding suburb; break duties; litter duties, and detention duties. The small staffroom whiteboard was updated in red ink each week to remind staff who was on duty, where and when, as well as which students were up for disciplinary hearings, and/or internal/external suspensions. Disciplinary rhythms consumed significant attention, time and effort from teachers.

⁶⁴ One vignette observed involved a supportive exchange between teachers as one assisted another with their large marking load.

7.3.2.1 Transitioning and late-coming

Transitioning and late-coming were both challenges at School B.

Transitioning

Students moving from break to class, or between classes, took on average approximately 15 minutes, with small pockets of students often remaining in the corridors deep into lessons. The turbulence seemed to originate at the start of term with timetable clashes and confusion, although teachers clarified that students moving slowly between lessons had always been a concern. Flux in the timetable served to provide a legitimate rationale for slow transitioning, making differentiation between genuinely confused students and those who wanted to socialise between classes almost impossible.

Substitution periods were particularly problematic, as students would arrive at the usual venue only to need to relocate to the substituting teacher's class. The principal recognised that this created difficulties:

I think the real problem comes because you've never got a day when you have... almost never have a day when you have a full complement of staff. That's actually the problem. If everybody was there, that moving thing, I think the difficulty would be halved. It's that the kids see a gap, and then just a little thing like this can... I firmly believe... when our staff don't go with this (because it doesn't suit them) that if you go and substitute a class you must go and substitute them where they normally get taught. You've got the best chance of them all being present. If you take them to your class, you're gonna lose a number on the way. Or they're gonna disappear on purpose. They're gonna act confused or be confused, dunno which.

But now you can't enforce that because... we had this problem of stuff going missing... the room would have a data projector in, and would be left unlocked, and then it would be stolen. So security becomes the issue and not being able to implement that.

School B Principal

The principal's contradictory description quoted above epitomises the types of dilemmas School B was struggling with: moving teachers made a lot more sense than moving 40 or more students, but security meant that teachers moving was risky, and the school struggled with theft (see "Security"). While the stickiness of rooming arrangements is more easily attributable to teacher resistance ("because it doesn't suit them"), the security issue—combined with the heavy lesson load—made teachers' reticence to move between venues around the school understandable.

Over hundreds of witnessed transitions, both concerns were present. Several encounters were observed where students were directly chastised by senior members of staff—even the principal—but outright refused to move to class, or (more commonly) feigned to move to their lesson, only to change course once out of sight. But these were the minority. At the start of the term, genuine confusion over timetable changes and clashes meant that many well-intentioned students became extremely frustrated as they tried to locate the correct room at the correct time (see “Students sentiments about School B”): hence bringing the *appropriate* habitus to school was also not necessarily productive.

Students also admitted to peer pressure to remain out of certain unpopular teachers’ lessons (referred to by the principal as the “wandering souls” about the school). At times students selectively stayed out of class to finish homework or assignments. Transitions also included students striking up a game of soccer, or cricket, in the grass quads in the centre of the school; others played music on loudspeakers, and on a few occasions, dancing was also a pastime between lessons. Some teachers would chase students to class, whereas others seemed weary of the pursuit and opted to stay in their rooms and work with those students who were present. Towards the end of February, the head of Grade 10 (who had a good relationship with the students) commented while clearing one quad of stragglers, “Ey, it’s like working as police here!”.

Missed lessons (red cells—Appendix A) resulted in whole classes of students wandering adrift in the corridors without a room in which to settle. Once the unattended group had been identified, they were often gathered in the foyer by the reception for oversight by adjacent or proximate staff. Often these groups were quite loud as they entertained themselves in the absence of the teacher (see “School soundscape”) which disturbed other classes, and several occasions were witnessed where certain teachers would interrupt their lesson to admonish students in the corridors or common areas for disturbance.

For the majority of lessons observed, anywhere from 20 to 60 students would be moving about the corridors and quads, or sports fields surrounding the school. Some would inform teachers that they had a ‘free period’ (substitution) (“No such thing as a free period! Get to class!”—Principal, School B).

Whether students were taking an opportunity or genuinely unable to access their class was not always clear. What was evident was the arrhythmia and disturbance this created on teaching and learning rhythms, not only for the students concerned, but for the whole school.

Late-coming

Moving bodies internally within the school was not the only challenge School B faced. As discussed in Chapter Five, the school had been struggling with late-coming to the point of compressing its timetable and starting half an hour later. As a result of this compromise, School B felt that a concomitant crackdown on late-coming was required to send students the message that now late-comers had no legitimate excuse. As one teacher on late-coming duty stated, "No, but you can't blame the buses any more. Last year at 8 o'clock you could, but now it's 08h30".

The front gate of the school was closed at 08h30 at the start of the school day, with late students being redirected towards a small entrance behind the administration block. Here they would line up and wait to be admitted into the school by the staff on late-coming duty. Late students were digitally finger-printed using a scanner⁶⁵, after which they signed a register and were moved to the main hall stage where they would await the next lesson change-over before slotting into the school rhythm.

Holding late students together was seen as necessary for two reasons: firstly, it prevented large scale disruption of the first lesson as students arrived late intermittently; secondly, it functioned as a form of detention. Students would sit on the hall stage without activity under the invigilation of the teachers present—a task clearly not enjoyed by the students, who clandestinely expressed their frustration on the furniture (see "Students sentiments towards School B").

Some late students would slip away from the late-coming queue and seek hiding spaces on the school's surrounding grounds (see "Whole site access: material space and dressage"). At lesson changeover these students would attempt to access the main school building through the usual student entrance towards the back of the complex at the Intersection, with mixed success.

The scale of late-coming was significant. Volumes of late-coming students waxed and waned from day to day, depending on a myriad of factors (mostly transport concerns). On a bad day, up to a hundred students would arrive late and be processed, with more awaiting lesson change-over in corners of the property.

⁶⁵ Such was the volume of late-coming that a digital capture system was introduced to streamline record keeping, as pen and paper methods were too inefficient and cumbersome and required manual capture. They were also prone to identify misrepresentation on the part of the students.

What complicated matters further was that applying disciplinary procedures to late-comers was clearly not always appropriate, and hence the discipline rhythm was also erratic. Most of the arrhythmia in late-coming dressage was due to concessions about transport.

Transport

A significant number of School B's students struggled with public transport⁶⁶. In addition to the severe traffic concerns in the city described in Chapter Five, the train arterial that students required to get to School B was shut down for an undetermined period of time between December of 2017 and late February of 2018 when this study was conducted, due to widespread infrastructure theft. This was further exacerbated by a city-wide bus strike in that same February. And, as the head of discipline described, these issues were further compounded:

Besides the public transport, the socioeconomic position of the learner with the (transport) money (is an) issue, as well as any external factors that affect the learner. Like we had service delivery rioting, service delivery placarding, burning of the buses, burning of the taxis... accidents! Accident on the freeway, burning the trains, stealing whatever from those train lines shutting down the trains... all of that affect us totally.

Every day I have to assess the situation about late-coming. So I get notes that comes to me now from either the taxi driver or the train driver or the bus driver that they send to me, they know Ms. ____ they send them to me, they say "Ma'am, this and this happened, please allow the learners to go to class." And I allow them to go to class. So you have to be compassionate with certain issues. You have to... I mean, I always work on the assumption of no excuses. I hate an excuse. But when it comes to late-coming there is definitely an excuse. And that's when I let down my guard when I say, 'no excuses!' (laughs)

School B Head of Discipline

These other factors were confirmed by students, who recounted issues of taxi violence⁶⁷ in their residential areas and other problems in getting to school.

School B's challenges with late-coming are in keeping with its exposed status. While the school had tried a relatively big adjustment to assist students to arrive on time for school, this adjustment seemed to be nullified by the widespread issues in the public transport system during the period of the study, and by the large proportion of the school's intake

⁶⁶ Teachers were also affected by the transport obstacles that caused students to arrive late, and substitution or missed lessons occurred in the first period of the day as a result.

⁶⁷ The phrase 'taxi violence' is commonly used in South Africa to refer to outbreaks of armed conflict between competing taxi associations, normally over lucrative transport routes through urban areas.

who relied on this transport. School B was exposed to the vicissitudes of its students' timespace-lived, and lacked the extra capital that might have assisted in mitigating these effects.

Hiring disciplinary help

One investment School B did make was in hiring one extra non-teaching member of staff to handle lesson transitions, late-coming and security. The principal was ambivalent about the efficacy of this decision: on the one hand, the extra hands on board were clearly needed. But on the other, he felt it eroded the teachers' legitimacy to enact authority in the eyes of the students, and also encouraged teachers to abscond their disciplinary responsibilities (which time-pressed and/or conflict-averse teachers would gladly avoid). Even if discipline could be outsourced in this manner, the scale of the issue was such that one person was not enough to manage the situation: in the event that a teacher missed their late-coming duty for whatever reason, this member of staff would have no choice but to allow late students to move to class, as he could not handle the large group alone. His tenure at the school was to end in June of the year of this study—how School B would manage late-coming in his absence remained a challenge.

As was the case at School A, School B's primary mode of dressage for infractions of various forms—including late-coming and internal truancy—was detention.

7.3.2.2 Detention

While detailed detention records were not available from School B as they were from School A, there was evidence that the disciplinary structures of the school were utilised throughout the period of the study (including several disciplinary hearings before the school governing body).

School B's code of conduct used an escalation process, where colour coded levels connected infringements to the length of detention to be served.

Level colour	Length of detention	Infractions
White	30 minutes	Classroom offences; late-coming for a lesson; uniform; going out of bounds; talking in assembly; avoiding punishment by not reporting to a teacher
Pink	60 minutes	Repeated classroom offences; repeated avoiding punishment; foul language; defiance; inappropriate physical contact between students; avoiding latecomers' punishment; bunking teachers' detention; spitting; poor behaviour in 'civvies' (non-uniform).
Green	3 hours on a Friday	Repeated pink offences; writing on desks; spontaneous fighting; late after 08:30; gambling; graffiti and vandalism; forging signatures or letters; leaving school without permission; missing pink level detention; habitual lying; bullying (1 st offence); physical contact of a sexual nature.
Yellow (1)	2 x 3 hours on a Friday	Repeated green offences; caught in presence of smoker; vandalism; verbal or physical abuse; possession of cigarettes or alcohol; bullying; bunking green level detention; repeated truancy; taking free rides on public transport.
Yellow (2)	4 x 3 hours on a Friday	
Red	Disciplinary hearing resulting in suspension or expulsion	Criminal acts (possession of drugs; assault; theft)

Table 7.1 Detention structure at School B

Table 7.1 has some unusual infractions listed, which gives insight into the types of problems School B would use detention to address. Some seem out of place (e.g. level pink: spitting), and others are context specific (spontaneous fighting, as differentiated from premeditated fighting; taking free rides on public transport). One common feature is punishment for 'avoiding punishment' or consequences (e.g. forging signatures), suggesting that resistance to discipline was a relatively frequent occurrence at School B.

Students who were given Friday detentions would be rounded up by the grade heads and taken to detention, where the teacher on duty would supervise the detention. The head of discipline was confident that the detention system worked, and that she never had issues in getting students to complete the detentions given them. Grade heads could immediately escalate a resistant/truant student to red level for senior management to step in.

The *absence* of observations where teachers used this structure to dressage student movement is relevant to timespace-lived at School B. Despite the difficulty moving students between lessons, not one incident was observed of a student being allocated a

detention for this. In support of this general sense that teachers did not fully implement the school discipline structure to the letter was the regular frequency of students smoking amongst the trees on the sports fields during break time, in full view, without disciplinary consequences. While a few small detentions were seen around the school on a Friday, these were a fraction of the potential number. That is: if the detention infractions outlined in Table 7.1 were implemented as stated, teachers would be running detentions for hundreds of students each week (a further form of work intensification). Given that teachers' mandated days at School B ran from 07h30am until 15h10pm with one 40min break and often lost free periods, reticence to deploy dressage at scale in this manner is in line with staff frustrations regarding workload (see "Staff sentiments about School B"). Dressage of the frequency and volume required at School B, in the absence of additional capital to increase staff numbers, required weekly investment of staff's personal time.

Detention duties were not the only potential depletion of staff's time. School B's staff also expended time on managing incidents of violence and substance abuse during school hours.

7.3.2.3 Violent incidents at the school

Several violent incidents occurred at School B during the course of this study. At least three incidents of student on student violence resulted in disciplinary hearings and suspensions. Such incidents were not unique to the fieldwork period⁶⁸. Such incidents disrupt rhythms, both through their visceral effects on staff and students, as well as through the extensive disciplinary work that they precipitate.

The principal at School B was clear that corporal punishment was not tolerated, although several teachers expressed a desire for corporal punishment as a disciplinary method in moments of exasperation when student discipline was particularly challenging⁶⁹. While no clandestine corporal punishment was witnessed during observations, there was an incident that resulted in one teacher being suspended pending an investigation. The details of the incident are unclear: by some accounts, the student had 'provoked' the teacher. By other accounts, the teacher had instigated the event. The principal suspended the teacher for assaulting the student pending an investigation, resulting in the loss of another member of staff.

⁶⁸ The head of discipline also recounted an incident in a previous year where a Grade 12 student had stabbed another student while revising before an exam in the library.

⁶⁹ This is not an uncommon desire amongst South African teachers. See Motseke (2019).

In addition to creating further arrhythmia through lessons once again being redistributed, these incidents also had strong emotional effects on the teachers at School B (see “Teachers sentiments”). Conflicts of these kinds between members of the school community disrupted the focus on teaching and learning.

7.3.2.4 Substance abuse

In addition to violence disrupting rhythm, several incidents also arose during the study when students were under the influence of substances while on school property. Substance abuse amongst students at School B was an ongoing form of disciplinary work. By the end of the first term, the head of discipline had conducted 25 urine tests, most of which had returned positive results (at the time of interview she had just sent a request to the provincial department for a further 20 test kits in preparation for Term 2). Students who tested positive were enrolled in a local drug counselling programme for six weeks; relapse after this programme would result in a disciplinary process. The head of discipline estimated that she ran drug testing every two to three days during her free periods⁷⁰.

One particular incident rocked the school community in early February. A female student experienced a drug-induced psychotic episode during which several teachers had to restrain her. The Grade 9 Head rushed her to the hospital once she stabilised, but other staff needed to cover his lessons in the interim. In the words of the Head of Discipline:

So after she smoked the whole stick, I think it was a bit too much for her system and she went into a rage. Totally screaming and shouting... totally berserk! Completely lost it. So we had Mr. _____, we had Ms. _____ and we had Ms. _____ sit... we had to hold her down. It was unreal. I've never experienced that before in my life actually. It was the first time I saw something like that happen at this school. Or at any school that I was in before.

School B Head of Discipline

This episode rippled throughout the school for the remainder of the week, with teachers and students clearly affected by what had happened. In addition to removing several teachers from their scheduled lessons, the students were also noticeably unsettled between classes and during break time.

⁷⁰ Further to the discussion on elasticities amongst staff in School B from Chapter Five, these observations provide texture to the focus and volume of deputies' efforts during their non-contact time.

While this particular incident was reported as exceptional, other drug use incidents were not. Incidents of violence—whether related to drugs or not—shocked the rhythms of School B relatively frequently, and were uncondusive to setting up a tempo that centred teaching and learning as the primary aim.

7.3.2.5 Assembly

School B ran regular timetabled assemblies once a week on a Wednesday. While the discourses in assemblies regarding who students were and who they should be (Silbert 2012) are not the focus of this study, the relation of assemblies to rhythm and timespace are. As with other lessons, assemblies began 10 to 15 minutes later than scheduled due to transition time. In addition to this, School B lacked a physical space large enough to hold the whole school, and hence assemblies were done by grade, with some remaining in register classes, while other grades used the larger venues (Lower Media Room, foyer, main hall) for gatherings.

Two assemblies were observed in detail: the Grade 9 start-of-term assembly in late January, and the Ash Wednesday assembly, which coincided with the interschool athletics event (since more than half the school was away that day). The first assembly was solely focused on discipline: classes with Grade 9 were expected to report their rules for the year, and the grade head spent the majority of the assembly affirming the code of conduct and threatening students with sanctions for non-compliance, particularly around punctuality. During this assembly, several instances of staff disciplining individual students directly were witnessed. Students were accompanied by staff in formation into the assembly, with several students' bodily hexis conveying a reticence to the military like routine of the gathering.

Prayer as positive dressage

Despite the significant antagonism between staff and students that produced arrhythmia, one type of activity observed during fieldwork produced a *eurhythmia* markedly different from the normal 'hum' of the school: prayer. While approximately six staff practiced Islam, the majority of the other staff self-identified as practising Christians. Staff's use of religious ritual to settle students was observed both during the Ash Wednesday assembly and at a few other moments during data collection (one other instance involved a late teacher who missed a substitution notice: on arrival, he transformed a loud and unordered group of students to silence at 1pm on a Friday afternoon without threatening punishment, by commencing a prayer).

Collective prayer time rendered students noticeably calmer and quieter than usual. Such vignettes suggest religion was a powerful form of shared cultural capital that was used to bridge conflicts between staff and students at School B. Invoking students' religious habitus brought them closer to the school's doxa, and was at times deployed to shepherd a chaotic rhythm back to the control of the teacher.

Overall, rhythms of movement and discipline at School B were asynchronous with the teaching and learning outlined in the timetable. Timetable instability created a perfect storm when combined with a sufficiently large minority of students holding an antagonistic habitus to institutionalized school. The effort to hold this arrhythmia required greater time investment on the part of teachers, who struggled to reconcile heavy teaching and assessment burdens with disciplinary duties.

In addition to student habitus and timetable instability, the material space of the school also contributed to the challenges, in both its design and its condition.

7.3.3 Infrastructure conditions: material meets social space

School B was built in the 1950s as a school formerly designated for Whites only. The design of the main building was similar to that of School A, with an administrative entrance unfolding into a reception area, proximate staff room, principal's office and hall with foyer, from which corridors and classrooms spun off. A small front garden with roses greeted guests on arrival.

But School B had several design features that created challenges for the staff and students. The most significant of these was the closed-ness of the single building: formed in a figure 8, all classrooms were enclosed in a relatively tight arrangement, and The Intersection (at the centre of the figure 8 structure) created a bottleneck on the flow of students between lessons, at break times and at the end of the day.

In addition to this tightness, staff would also attempt to prevent students moving through the foyer during break and transition times, as the glass doors that fronted this space risked damage by heavy foot traffic as doors were slammed or crushed (damage to these glass doors occurred during fieldwork). Closing off the foyer space funnelled all students accessing one half of the school through a single corridor.

The head of discipline at the school was of the opinion that the school was over-full spatially, and that this presented significant risks for emergency evacuation. School B did not have the economic capital to build further buildings of its own accord (even though it had the ground space to), and what expansion had happened had been funded by the provincial department.

School B also struggled with infrastructural maintenance, and this was visible throughout the site. Regular attempts to interview the head of maintenance were constantly postponed (see Chapter Four on data collection struggles), but this perhaps may be attributed to a sense of vulnerability in discussing how much the school clearly struggled. Throughout the site, the walls needed paint, several ceiling boards indicated water damage due to roof leaks, and holes in the linoleum floor presented trip hazards in the corridors. The doors on classrooms sometimes were missing handles or hinges, and several windows were damaged. The maintenance team (four members) were regularly moving about the school, but efforts seemed to focus on cleaning, keeping facilities functioning and dealing with graffiti⁷¹. The buildings were functional, but shabby, with very little wall adornment (see "Material space aesthetics").

Outside, the sports courts were in a state of disrepair, and students had converted what few dustbins were available into goal posts for playing soccer (the volume of dustbins was insufficient for the size of grounds or the number of students, creating a perennial litter problem). The school had sourced a new perimeter fence from the WCED (see "Security") although this did not prevent students from jumping the fence regularly.

One major maintenance project began towards the end of term: the school had been saving to replace leaking gutters and rotten fascia boards before the winter rains. According to the deputy in charge of finance, the school constantly had to trade-off between projects that needed doing: in this case, the gutters had taken preference over the upgrade to the tuckshop. Even then, the decision was to choose the cheaper plastic over aluminium, and to use a contractor who had offered a discount as a friend of the head of maintenance (social capital). To add to the school's financial worries, the school's maintenance vehicle of 20 years standing had been stolen that week, and needed replacing.

The approach to maintenance was in stark contrast with School A's 'quality over cost' philosophy. Rhythms of maintenance at School B were a holding pattern, keeping facilities

⁷¹ One member of the team would roam the school with a large tin of white paint covering up graffiti on the walls twice weekly. This included painting over a series of swastikas drawn in one upper corridor in a blue felt tip pen.

functional as far as economic means would allow, but with little ability to plan longer capital investment projects. In the words of the deputy overseeing finance:

I mean, we won't have money to be able to build a class, no. The monies that we collect with the Environmental Day and the raffle, we tend to pinch from that to do the maintenance, but we do maintenance bit by bit. Like roofing is a major, major problem. There's leakage... I'm sure you've noticed there's leakage. And, uh, like now we're working on the fascia boards... But the bakkie⁷² is now an immediate.... And things like the curtains, the stage curtains. These need to be replaced, but that's always put on hold. It's not an emergency. So, as the money becomes available... there seems to be, for some odd reason, a bit more money now than previously at this time of the year, so we're actually breathing. But the girls are working very hard.

School B Finance Deputy

The 'girls' referred to in the above quote are the two staff employed to follow up fees as mentioned in Chapter Five. Their relative success month on month dictates the rhythms of maintenance in the school, what can be afforded, and what is placed on hold until funds become available. But the margins between what is required and what is available are fine, and a single knock (such as the theft of the school maintenance vehicle) is sufficient to deplete any slim reserves accumulated. The rhythm of maintenance was tightly bound to the rhythms of capital flow.

7.3.3.1 Storage

While School B had some storage spaces, these were far less capacious than those at School A. Moreover, School B lacked the non-teaching staff to manage such spaces. Books were stored in a classroom until distributed (by teachers—see "The start of term"). Two under-stairs areas served to store sports equipment (haphazardly) and the table tennis materials were kept in a somewhat disorderly manner in a corridor between the main hall and the administration block (also both spaces managed by teachers). LTSM was stored in administrative corridors near the senior staff offices, and the reception office was lined wall to wall with filing cabinets for paperwork. The finance office adjacent to the staffroom doubled as a reprographics room (much to the ire of the administrators who felt this compromised the room's security). The science storerooms suffered structural damp issues that had rendered much of the materials stored there as unusable (despite efforts by two science teachers to remedy the situation). At the back of the main hall, curtains

⁷² 'bakkie' is South African slang for a small pick-up truck i.e. the school's maintenance vehicle.

hung on makeshift rails built from PVC pipe and duct tape to cordon off the stacks of chairs used during school events such as prize giving.

For individual classroom materials and teacher LTSM, staff had lockable lockers in the work-section of the staffroom. In addition to this, most classrooms could be used to store materials as students were not permitted in these rooms without being accompanied by a teacher. Student storage was a significant issue: the number of (serviceable) lockers available were far too few for School B's enrolment, and all were concentrated in a single area of the school (see Chapter Five). However, as many students arrived at School B by public transport, and extramural participation was not as extensive as at School A, students also carried far less equipment and personal belongings and required less storage space as a result.

Very few objects of any type were left unattended in the corridors of School B, since internal theft was a significant concern. The next section speaks to the security situation of the school and its effects on rhythm and timespace-lived.

7.3.3.2 Security

One area of infrastructural investment at School B was security. Of the 39 classrooms at the school, 20 had security gates installed across their doors and nine had bars also on the *internal* windows that faced into the corridors. CCTV cameras were installed throughout the school.

However, beyond the new palisade fence⁷³, there was very little security on the school perimeter or entrance points (beyond video monitored access control by the reception door for visitors). Entrance into the school grounds from the street via the main gate was relatively easy.

When data was collected for timetable adherence, notes were also made on the open or closed state of classrooms. Throughout the entire observation period, only **one** empty open classroom was observed, with all other empty rooms locked at all times, including the library.

⁷³ According to the principal, students once used a pedestrian access point at the far end of the schools' sports fields, which significantly shortened the walk from the nearest train station. However, this route traversed a green belt running along an urban waterway, and allegedly students were vulnerable to robbers who frequented the area. After placing significant pressure on the provincial MEC for education, the principal managed to secure a new perimeter fence for the school. However, closing the pedestrian access point forced students to walk half a kilometre further to gain access to the school.

According to the member of staff who was employed to assist with security (as well as late coming), the CCTV cameras were installed two years prior to the study, and had much improved the internal theft situation. Prior to that, the school was losing equipment regularly, and at one point lost five data projectors in a week—it had reached the point that the school's insurance was refusing to pay. Only two computers remained in the library of the original five that had been installed.

CCTV had also increased students' sense of security over their belongings. Two female students remarked that they felt their bags were far safer in line of sight of a camera, although one stated that her mother "GPS tagged" all her belongings anyway.

The effect of all the security was a shutting down of flow through the school for objects and people, particularly students. Student access to items of value always required staff presence, making movement of students further contingent on movement of staff. Lack of internal safety articulated keenly with substitution duties, creating turbulence and arrhythmia. For School B, exposedness meant security was an internal as well as external threat, and hence far more difficult to manage than just perimeter porosity.

Whole site access: material space and dressage

The layout of School B's buildings relative to its ground space made controlling flow of students during lesson time quite different to School A. The entire building was enclosed during classes, meaning students inside the building could only access corridors and quads (not fields, or other classrooms)—this concentrated bodies into internal spaces. The fields and grounds surrounding the main building were contiguous and without subdivision, requiring staff presence to ensure late-coming students moved into the building... and many did not, opting to hide in various less visible corners of the property until access could be gained without threat of punishment.

At times the building needed to be kept more open since a venue was in use by a rental client: on such occasions, students were witnessed moving in and out of the building during lesson times, and often jumping the fence or making use of an open gate to go home or visit a local shop for food and cigarettes.

In general, the structural design of a compact building amidst large open grounds created an all-or-nothing binary for School B: either the whole building was completely closed, concentrating all inside, or the whole ground was completely open, making control of flow almost impossible.

The final challenge in infrastructure for School B was the flow of information, and its reliance on digital and reprographic means to disseminate notices about the school for staff and students alike.

7.3.3.3 Digital and reprographic technology

Notice boards and print outs for administrative purposes were far scarcer at School B than at School A. Information for teachers was mostly disseminated by digital means, in meetings or by hand written notices on the staffroom whiteboard. Many notices placed up on walls were out of date and hence not useful.

Digital technology

School B teachers and administrators primarily relied on face to face communication, email or *WhatsApp* to inform each other of information or events. However, while the school had internet connectivity for staff (but not students), the use of smartphones (staff's primary type of personal device) was often at odds with teaching and learning activity, making communication sporadic.

Digital technology in classrooms was piecemeal. Staff with data projectors in their classrooms (18 rooms in total) had to provide their own devices in order to utilize these (with no supplementary funding such as that provided at School A). A few rooms also had smartboards installed, although insufficient data was collected to comment on the use of these.

There were two computers visible for staff use in the work-area of the staffroom (contrasted to an entire separate computer lab for staff at School A). The school also used the *Staffroom* software application to store student marks, generate reports and communicate notices. But in the absence of staff having reliable access to devices to use *Staffroom*, this was more for administrative than communicative purposes.

School B did use digital technology to manage late-coming and financial collections. According to the principal, one of the debt collection staff managed a huge workload that previously fell to teachers, including automated SMSes to fee-defaulting parents, keeping records stored on *Staffroom* up to date, processing student fingerprint records for late-coming, and entry of the school's assessment and enrolment data into the CEMIS system. This particular role also alleviated the challenges for staff who were not as computer literate (cultural capital).

Reprographic technology

School B had several printers and photocopiers around the school placed in the reception administrative area, the finance room and the two computer labs. What inhibited the use of hard copy notices was not the availability of the technology but the cost of running it. The deputy in charge of finances said the school had to ask students for a separate 'paper fee' for photocopies for the year, and there seemed a genuine reluctance to make unnecessary print outs and copies. All copies were on white paper only, with only one printer colour capable (a feature that was rarely used). Tight economic capital meant School B could not be careless with printer ink and paper.

But this affected the distribution of information around the school, particularly to students. Substitution notices would be pasted on the doors of the absent teacher, informing students where to move, but at times these were out of date, or missing⁷⁴. Notices about sports events and cultural events placed on the student notice boards were often hand written. In general, the paucity of written information for students was striking, with many noticeboards empty or sparse. Students who were inclined to synchronize to the school's rhythm were often inhibited from doing so by the arrhythmia of information available.

All these mis-firings between the timetable, flow of people, flow of objects and flow of information around School B created a lot of stress and conflict. The next section examines how School B's students and teachers perceived their experiences while at school.

7.3.4 Timespace-perceived: subjective experiences of teachers and students

As mentioned for School A, teacher and student subjective experiences of school activities and places (timespace-perceived) shape—without determining—their inclination to acquiesce to school rhythms. Observations during fieldwork produced multiple events that spoke to this subjective experience.

7.3.4.1 Material space aesthetics

School B lacked the capital required to attend to spatial aesthetics. At first impression, the building seemed functional, spartan, clean, but with dated décor and fittings that had not been upgraded since the school was first built. The entrance to the main reception area

⁷⁴ On one occasion, a student had removed and shredded the substitution notice.

was dominated by several tributes to World War 2 soldiers and figures (the school being built in the early 1950s meant that that historical moment still loomed large when the school was constructed). Walls around the school were mostly bare bar one or two posters and notices. Two internal quads provided some greenery, and the age of the school meant that some established trees had developed around the main building. A fountain donated by alumni in one quad was disconnected due to the drought.

On moving into the foyer beyond the reception area, guests were confronted by old-fashioned wooden panels on which the names of donors and awards were engraved. The panels mostly remained empty. A glass-fronted cabinet exhibited some student work, but it also appeared very dated and had remained unchanged for several years. Another glass-fronted cabinet included portraits of former principals (all white men) from the apartheid era. Unlike at School A, School B students would not have seen themselves or their work reflected back to them in the spatial qualities of the school.

A few donations around the school served as tributes from past cohorts of students, but the dates of these all stopped around 1995 (with one exception of one plaque with a mounted statuette donated by the matric group of 2000). All painted walls were white, with some graffiti evident on unpainted brickwork. School B's older architecture was a longstanding asset, but investment regarding aesthetics were kept to a minimum. This coupled with the visible lack of maintenance made the school building seem shabby and sparse.

Staffroom

The staffroom was clean and well kept, although the kitchen required structural work. Some chairs were old-but-mended, and others evidently newer, with some tables available for staff to sit and eat together. The school used to stock tea, coffee and milk, but this had been stopped due to budget cuts and staff had to provide their own. A small fridge was available for staff to keep the food they brought from home. As at School A, the architecture of the staffroom included a large wall of windows for natural light. An A/C unit had been installed to provide warmth in the winter and coolth in the summer. Of all the spaces in the school, the staffroom was one of the more pleasant, but details belied a lack of capital for basic comforts (such as tea and coffee).

Library

School B's library was clearly in need of upgrading. The old furniture and shelving were made of solid wood and hence kept well, but the contents of the shelves were disordered, and the material available was mixed (some age appropriate fiction, but a lot of dated material—including of apartheid era historical texts). The magazines in the library were several years old, and the donor plaque for the room dated to 1995.

The library as a space was run by a student committee who would open it periodically for break periods (see "Student sentiments about School B"), and check books out for other students. The principal stated that a retired ex-teacher had once worked as the librarian on a voluntary basis, but had subsequently emigrated, leaving no staff available to run the room⁷⁵. The back office of the library had been commandeered for the security personnel who monitored the CCTV network from this location.

7.3.4.2 The soundscape of the school

School B's rhythm was evidenced by its soundscape. During lessons, the dominant noise was a blend of teachers' voices, students in the corridors (often punctuated by teacher reprimands) and the sound of vehicles on the adjacent highway⁷⁶.

During transitions, student voices would crescendo, at times to overwhelming levels. Some senior students would bring battery operated loudspeakers which they would play music on as they moved through the corridors, or at breaktimes (these speakers were seen as a discipline issue by staff). Transitions were signalled by the use of a loud klaxon siren as a school bell. Prior to the end of the school day, the principal's personal assistant would announce various after-school activities over the school intercom. One instance of birdsong was heard during fieldwork, and was notable for its juxtaposition to the normal sonic environment of the school.

The primary contrast between School A and School B was the volume at which students and teachers all spoke, irrespective of whether these were positive or negative interactions. School B was audibly louder in every way, and the louder voices were exacerbated by the empty walls of the corridors which reverberated sound.

⁷⁵ A room reconfiguration towards the end of term meant that the Grade 8 head moved into the library as a permanent classroom after this study was completed.

⁷⁶ School B sat in the elbow of a major spaghetti junction between two arterial routes through the city.

7.3.4.3 Staff sentiments about School B

Throughout the fieldwork period, interactions occurred with and between staff that gave the impression that their experiences of the school's arrhythmia were stressful and challenging. These incidents were not ubiquitous amongst all staff at all times, but arose daily in different moments and amongst different teachers and/or administrators.

Some staff were more vocal and outgoing in expressing their sentiments, and seemed to find the presence of a researcher an invitation to share these. On one day, more than eight different staff members expressed negative emotions directly to me as a witness. These ranged from feeling unappreciated when acquiescing to the school's expectations ("You do your job, you get ignored", "I have the rubbish jobs in the school") to exasperation at students' lack of self-regulation ("Welcome to the new South Africa"—meant in reference to the students as indicative of the country's next generation), to being ready to quit ("This is my last day here").

On other days staff would express desperation for the holidays ("Almost there") to extreme time pressure ("There is no free time! Look at all these other duties etc.") and an explicit sense of the arrhythmia of the school ("Everything is coming and going'... 'back foot'... Can't plan, never know what's going on"). These latter statements suggested that teachers found the lack of synchronicity between timespace-lived and timespace-conceived at school difficult to bear.

Staff interactions ranged from anodyne through jovial to fraught. The staff meeting was noticeably tense, and teachers expressed frustration at the changed timetable, the reduction of two breaks to one, student behaviour, workload and feeling unsupported by other staff—most frustrations could be described as resulting from various school rhythms disrupting rather than supporting teaching and learning.

Not all interactions were negative: break times were often collegial, and the staff who smoked clearly sought each other's company and counsel, even if only to commiserate about a difficult day. But through the ebbs and flows observed, the most *consistent* theme when observing staff was a sense of stress and frustration. Most staff seemed to be doing the best they could, and finding their best not sufficient, suggesting that the lack of capitals available to School B manifested in a visceral sense of inadequacy. This stress often spilt out into what Christie (1998) terms 'psycho-politics', where errors and difficulties are attributed to other members of staff or to students, rather than to the structural circumstances of the school.

Adding to the stress of staff was the financial precarity of the SGB-paid teachers: as described in Chapter Five, the school was uncertain from one month to the next whether SGB staff would be paid on time. At one point, a teacher asked me as a researcher whether I knew if the government would step in to pay SGB staff when the school could not. Wage precarity was a real concern for some staff: it is difficult to imagine eagerness for an intense and demanding school rhythm under such conditions.

Teachers' emotional states from home interacted with their working rhythms. For example, in addition to the prolonged leave of absence by the bereaved member of staff, another member of staff was also temporarily absent (and afterwards, visibly distracted) after her nephew was fatally shot outside her home in a gang related incident. Another staff member spoke of struggling to support a friend with a dementia diagnosis, and yet another of a spouse with bipolar disorder. Several of these teachers spoke of how the stressfulness of school was difficult to bear under such conditions. Not only were the students of School B from exposed and precarious backgrounds, but the staff often lived in similar areas, came from similar socio-economic origins, and were susceptible to the same vicissitudes. Their realities beyond the school no doubt also impinged on their work lives and the rhythms they could sustain.

7.3.4.4 Students' sentiments about School B

Students at School B were not shy in making their thoughts and feelings known. Several vignettes occurred during fieldwork which gave insight as to how the students experienced their school:

1. In one instance, a group of senior students in Grades 11 and 12 expressed anger. They wanted to learn and felt they were not receiving a quality education. In the year preceding the study, allegedly a maths teacher had resigned in the second term and the school had struggled to replace them for the remainder of the year⁷⁷. These students made statements such as "School B is not School B any more... the school is in decline." The same group also felt that homework was an unfair expectation on students who commute so far (some in the townships and flats over 20km from the school), and admitted that they skipped classes to complete assignments. This scenario suggests students, too, felt a sense of time scarcity when their commute clashed with their schooling obligations.

⁷⁷ This information suggests that staff attrition was not as exceptional as the fieldwork period may have initially suggested.

2. Another incident on a Tuesday afternoon involved a student who was wandering the corridors during lesson time. This student said he “didn’t feel like going to class” as he’d written a test in that lesson the previous day. After walking with him to class, it became apparent that his aversion may be due to the physical conditions, as the room—which would have been tight for a class of 35—contained almost 50 students (several seated around the teacher’s desk).
3. A group of students awaiting a music class expressed a strong opinion that the school should foreground music, drama and art, not maths and science. They felt that the school’s students were ‘very creative’, and this observation was in keeping with the ubiquity of dancing and singing amongst students around the school as a pastime. Drawing on the analysis in Chapter Six, the interests of students regarding preferred cultural capital was at odds with how the school strategized to play the education game through curriculum configurations.
4. On a Friday afternoon, an unattended group of students were awaiting their Xhosa teacher, who was a grade head investigating a fight that occurred at break time. One student pointedly remarked, “I love my school Ma'am but since Grade 8, we are not learning. Yoh, we are frustrated. Then our marks are bad”. These students felt robbed of their teacher’s time when her attention was divided between multiple conflicting duties.
5. One older Grade 9 student (turning 18) expressed frustration at the immaturity of his classmates who were up to three years his junior. He is old for his grade due to repeating once, and starting school late. The arrhythmia evident in a heterogenous class of differently aged students manifested as frustration in this instance. In general, some students felt sympathy for their teachers while others felt the staff around the school were too quick to anger.
6. Students also vented their frustration regarding late-coming penalties: during one late-comers detention on the stage of the hall, one student had taken a blade to the velvet stage curtains. The desks on the stage were also covered in graffiti, some of which could be considered typical teenage messaging, but some also expressed anger and frustration at the school (perhaps these students felt being punished for their own lack of time sovereignty was unfair).

Each of these vignettes adds texture to students’ awareness of, and contributions to, the arrhythmia of their schooling experiences. Some suggested solutions to the issues (less homework, different subject offerings), while others described the origins of issues pointedly (teacher attrition or displacement, student habitus misfit and timetable inelasticity) and connected these rhythms to the results of teaching and learning. As was

the case amongst teachers, students' timespace-perceived and its negative effects produced conflict between students and staff, as faults were easier to attribute to the decisions of others than to structural origins, or the relations between material conditions, school rhythm and everyday activities.

Small sanctuaries

Students' experiences were not all negative. Many clearly enjoyed playing sports during break times, and several teachers seemed to have a good rapport with their classes (on one Friday afternoon, one of the Xhosa teachers sang a song for her students, to loud applause). The students who opened the library at break time provided a quieter space for those who found the corridors and fields overwhelming: some sat and did homework during their break (eating sandwiches clandestinely under the tables); others set up chessboards and played games against each other.

One junior teacher had a successful and popular table-tennis club that ran during break times. Students would assist in setting up the tables and packing them away again. Those not playing would watch the match in session keenly. Other small groups of students would linger after school hoping to make the most of small opportunities: two students particularly stood out as eager piano players, and another small group attended IT club on a Friday where they were learning how to code.

The student body at School B was incredibly diverse, and the challenges around lesson transitions or truancy described earlier in this chapter did not apply to the majority of the students. But a sizeable minority contributed enough to the arrhythmia to make holding teaching and learning as the core rhythm a tense and energy-sapping exercise, generating frustration not just amongst the teachers, but amongst the students as well.

7.3.5 Fortified or exposed? Repetition and difference

School B had its own unique rhythm. It became apparent throughout the fieldwork that this rhythm was not synchronous with the timetable, or the teaching and learning routines that artefact organised. What arrhythmia manifested was borne of attempts to reconcile the two antagonistic rhythms, primarily through processes of dressage and discipline.

But acting as an opposing force to this reconciliation was School B's exposedness. Transport failures, violence and drug incidents, trauma in student and staff's private lives, theft of school property, teachers resigning, and sufficient students with a habitus antithetical to the sit-still-be-quiet requirements of schooling, constantly threatened to render asunder what fragile coalitions of rhythm had been sutured together. The stress of this constant effort just to tread water manifested as frustration and anger amongst staff and students alike.

Rhythms unite with one another in the state of health, in normal (which is to say normed!) everydayness; when they are discordant, there is suffering, a pathological state (of which arrhythmia is generally, at the same time, symptom, cause and effect). The discordance of rhythms brings previously eurhythmic organisations towards fatal disorder.

(Lefebvre, *Rhythmanalysis*, 2004, p.25)

In this excerpt, Lefebvre could well have been writing about School B. The dissonance between the rhythms required from the field of schooling for success, and those that School B could muster generated an arrhythmia that at times became its own *raison d'être* (for example, with teachers who didn't want to move rooms). This arrhythmia reproduced itself not just in the everyday activities of the school, but also over time through the school's results. The next section compares School A and School B for both their rhythmic similarities and differences, and examines the academic results that aligned with each.

7.4 Similarities and differences: how the schools' rhythms compared

This chapter has explored in detail: the fidelity of each school's timespace-lived to the timetables they set themselves; where deviations from the timetable were evident, and the reasons for these; as well as the other rhythms in the school that were required to support the core rhythm of teaching and learning.

7.4.1 Rhythm intended vs. rhythm enacted

Systematic coding of room use showed that both schools adhered very closely to their timetables: School A at 100% (outside of the deviation by design), and School B at 98%. School A exhibited far more elasticity, enabling unscheduled room use, whereas School B's room use was brittle due to security issues.

7.4.1.1 Pre-emptive or reactive changes in rhythm: deviation by design or default

Almost all of School A's deviation from the timetable was by design. But even when by default (absent teachers), elasticity was well deployed to neutralize these variations in predictable ways, ensuring teachers' non-contact time was still protected, and that resentment did not result from excessive substitution duty. School A teachers were also protected from disciplinary duties to a large extent.

School B's deviation was mostly by default due to staff loss. While the school had similar absence rates amongst its staff compared to School A, it lacked the manpower to weather these absences without disrupting rhythm. In addition to this, weak information flow through School B meant that reactions to rhythm deviations were sporadic, and at times resulted in missed lessons. Staff at School B were on occasion required to be in two places at once, creating dilemmas that potentially interfered with teaching and learning—these dilemmas were exacerbated by School B's students being a lot less self-regulatory and requiring more adult supervision.

7.4.1.2 The authority of the timetable to regulate timespace

The stability of School A's timetable gave it authority as a reliable artefact to regulate teaching and learning. Despite starting the timetable at the same time (September the previous year), School B had to reorganise its timetable twice in the first two weeks of the

year, creating clashes and confusion, and weakening the artefact's hold on timespace-activity arrangements.

Timetable modularity made the difference between assessments fitting within the timetable's design (as at School A), or timetable adjustments needing to be made, further eroding the main timetable's authority (as at School B).

7.4.1.3 Dressage and habitus: distractions from teaching and learning

Rhythms of discipline were distinctively different at each school. While both used detentions to dressage students back into conformity, the volume of effort from teachers at School A, as compared to School B, was far less. School A could also outsource disciplinary work to prefects, whereas School B's teachers needed to carry this load. Transitioning at the schools was markedly different, and lesson time at School B was undercut by the time students took to move between classes.

7.4.1.4 Mutually constitutive: material space, social space and subjective experiences of schooling

The rhythms described in this chapter do not neatly fall into cause-and-effect categories: material space interacted with social space; rhythms were supported by, or interrupted by, student and staff's experiences; deviations were amplified or mitigated by student habitus; elasticities exacerbated or contained minor knocks or unforeseen events. Rather, the two constellations described in each school exhibit the differences between fortified and exposed contexts and the practices that emerge in each.

Teachers at both schools worked hard and expended large amounts of time at their jobs. But while teachers at School A could spend the time on matters of academics, or sports, music, art and cultural activities, School B teachers spent their time on larger assessment loads, administrative work and disciplinary duties.

A final vignette perhaps illustrates this difference keenly: a music teacher at School B had to cancel a Friday afternoon piano lesson with an enthusiastic student because he had detention duty. This is an example of the type of trade-offs exposed School B regularly confronted, that fortified School A simply didn't need to consider.

The final section of this study completes the cycle: how capitals build timetables that enable rhythms that beget results, which then attract capitals again.

7.4.2 Relating rhythms to results

What became of all these rhythms in each school? How did the social, cultural and economic capitals commanded by each school translate into the symbolic capital that defines the field of schooling? What follows is an examination of each school's NSC offering by enrolment and by results, to complete the analysis of how fortification and exposedness play out.

The following table describes the subjects offered by each school for the national senior certificate exams for two years (2016 and 2017—see Appendix D for results going back to 2010 for both schools), along with the percentage of Grade 12 students enrolled for each. The cells highlighted in grey indicate subjects where students wrote examinations but lessons were not scheduled into the main school timetable.

Subject	School A		School B	
	2016	2017	2016	2017
Accounting	17%	24%	11%	17%
Afrikaans First Additional Lang	97%	94%	46%	42%
Arabic Second Additional Lang	-	1%	-	-
Business Studies	-	-	35%	45%
Consumer Studies	-	-	21%	21%
Dance Studies	1%	-	-	-
Dramatic Arts	2%	1%	-	-
Economics	-	-	33%	35%
English Home Language	100%	100%	100%	100%
French Second Additional Lang	14%	11%	3%	1%
Geography	40%	35%	41%	34%
German Second Additional Lang	1%	1%	-	-
History	55%	60%	44%	52%
isiXhosa Home Language	-	-	15%	28%
isiXhosa First Additional Lang	2%	5%	35%	25%
isiXhosa Second Additional Lang	12%	6%	-	-
Information Technology	4%	1%	6%	11%
Italian Second Additional Lang	2%	2%	-	-
Life Orientation	100%	100%	100%	100%
Life Science	84%	80%	72%	60%
Maths Literacy	20%	15%	34%	34%
Mathematics	80%	85%	66%	66%
Music	4%	4%	3%	3%
Physical Sciences	65%	66%	36%	25%
Visual Arts	13%	15%	-	-

Table 7.2 Percent students registered for NSC exams in both schools 2016 and 2017.

Table 7.2 shows that School A offered a broader curriculum suite of electives than School B, and also integrated more additional subjects not officially taught at the school into the examination registration for these candidates. School A did not offer the 'softer' subjects of business studies or consumer studies, and didn't offer economics as this is not a prerequisite for studying economics at tertiary level. School B offered far more commerce-type subjects and far fewer arts subjects. Also, given School B's demographic, they enrolled a sizeable proportion of their students to write isiXhosa home language.

Of particular note regarding the relative fortified/exposed status of each is the ratio between mathematics and maths literacy. At School A, 80-85% of students took mathematics, whereas at School B only 66% did (bearing in mind the minimum of 60% stipulated by Dinaledi constraints).

The following table describes how these enrolments translated into symbolic capital in the form of Grade 12 pass rates for each subject:

Subject	School A		School B	
	2016	2017	2016	2017
Accounting	100%	100%	55%	56.7%
Afrikaans First Additional Lang	100%	100%	97.7%	90%
Arabic Second Additional Lang	-	100%	-	-
Business Studies	-	-	70.8%	62.3%
Consumer Studies	-	-	82.1%	80%
Dance Studies	100%	-	-	-
Dramatic Arts	100%	100%	-	-
Economics	-	-	50.8%	73.3%
English Home Language	100%	100%	96.2%	93.5%
French Second Additional Lang	100%	100%	100%	100%
Geography	100%	100%	62.2%	64.9%
German Second Additional Lang	100%	100%	-	-
History	100%	99.1%	93.8%	95.4%
isiXhosa Home Language	-	-	100%	100%
isiXhosa First Additional Lang	100%	100%	96.9%	97.6%
isiXhosa Second Additional Lang	100%	100%	-	-
Information Technology	85.7%	100%	33.3%	10.5%
Italian Second Additional Lang	100%	100%	-	-
Life Orientation	100%	100%	100%	99.4%
Life Science	98.7%	98.6%	51.9%	46.1%
Maths Literacy	100%	100%	61.9%	64.4%
Mathematics	98.6%	98%	27.7%	20.7%
Music	100%	100%	100%	100%
Physical Sciences	98.3%	99.2%	27.3%	32.6%
Visual Arts	100%	100%	-	-

Table 7.3 Pass rates (40% < achievement) for both schools in 2016 and 2017.

Table 7.3 foregrounds how School A produces far larger quantities of symbolic capital in the form of results compared to School B, not only in pass rates, but also in higher status subjects such as mathematics and physical sciences.

School A was able to coordinate who taught whom what, with what, where and when into successful rhythms that produced the goods. In doing so, the school's fortification was confirmed, enabling future attraction of capitals in the form of Grade 8 students who had the appropriate habitus, cultural capital and fee-paying capacity. School B performed relatively well compared to the nationwide average, but certainly not in a manner as to command the same field position as School A.

7.5 Conclusion

This chapter has attempted to describe the messiness that was everyday reality in each school through the lens of rhythm. Beginning by a systematic analysis of data gathered to codify each school's adherence to its own timetable, differences and deviations were then explored using rich observation and interview data to sketch the various rhythms supporting or disturbing the rhythm of teaching and learning.

Read against the previous chapters, the different forms and volumes of capital—as shaped by post-apartheid policies—is filtered through the artefact of the timetable and emerges as a polyrhythmia of quite different types in each school.

The conclusion that follows unpacks these combinations of rhythms and capitals as a novel mechanism of understanding how (dis)advantage produces and reproduces (dis)advantage in South African ordinary public schooling.

8.

Summary and discussion: reproducing rhythms

8.1 Introduction

This thesis set out to investigate how timetables mediate policies that reach to construct rhythms of teaching and learning in schools, and whether there were visible differences in timetables that might indicate alternative theories of change regarding schooling inequality. The first two chapters outlined the problematic and research questions, and developed a theory of rhythmic practice rooted in a plural definition of social timespace. Chapter Three then explored what existing literature says about schooling timespace, rhythms and timetables, against the backdrop of research on schooling inequalities in South Africa. Chapter Four developed an analytic framework that traced policies that reach through the timetable, using the five stranded model of who teaches whom, what, with what and where, and then leveraged this structure to design a methodology for data production around timetables, policies and rhythms.

The previous three analysis chapters have laid out in detail the timetables for each school, the capitals used to build these timetables, their origins in policy, and the daily rhythms each school could sustain, along with the relationship of the timetable to these rhythms. Aspects of fortification and exposedness characterized School A and School B respectively.

In Chapter Five, timetable qualities of elasticity, granularity and modularity were examined for each school. These were then traced to the forms and volumes of capital available. Economic capital in the form of collected fees emerged as both the means of acquiring other forms of capital (extra teachers, support staff and extra spaces) as well as an important (if tacit) influence on cultural capital attracted through student applications (schools could accept cultural capital without attached economic capital, but schools attempted to minimize the number of fee exempt students to protect financial liquidity). Capital *in* timespace also came to the fore, with fee collection rhythms and rates underpinning capital liquidity and stability, and with these, planning horizons.

The origins of these forms of capital were explored in Chapter Six. Marketized schooling application processes allowed schools to select students based on who they could attract from their field position, while the funding policies ensured schools' right to access private supplementary funding (fees, donations, rent). This supplementary funding is almost totally unregulated, again playing to market forces, as schools with advantage could attract significant supplementation. Meanwhile, public aspects of capital provision treated

schools as equal: public provisioning of teachers was equivalent in real terms (PPN/PAM), the curriculum to be taught in both schools was standardized (NPPPR) and—in the case of School A and School B—per learner allocation of funding (NNSSF) was also equal (see “With what: implications for more exposed schools” below). Policies also exhibited a timespace-conceived that fits a middle-class timespace ideal, with long planning horizons, tight clock schedules and assumptions about student mobility across the city. Such assumptions are at odds with the timespace-lived of more precarious schools.

Finally, Chapter Seven explored the rhythms at each school, examining how the qualities of the timetables built with aforementioned capitals affected daily rhythms of teaching and learning. Timetable qualities and planning horizons brought by fortification or exposedness produced timetable deviations that were either by design or by default. This chapter also explored the other school rhythms that sheltered or disrupted the timetable through the movement of bodies, objects and information around each school. Timespace-perceived suggested both schools were time pressed environments but for different reasons. School A’s eurhythmia enabled intense but productive rhythms focused on teaching and learning. School B’s arrhythmia rendered efforts unproductive and frustrating, resulting in conflict and alienation.

It warrants repeating in summary that there were many similarities between the schools, beyond those outlined in Chapter Four. Teacher qualifications across both schools were similar, as were experience profiles. Day to day absence amongst teachers for ill health or personal responsibilities were similar. Both schools experienced knocks: drought, traffic, student ‘misbehaviour’, sick staff, etc. What differed was both the frequency of these events and the schools’ relative capacity to respond: not only did fortified School A have fewer knocks to weather, but in many cases the minor vicissitudes were pre-empted and absorbed or avoided, while exposed School B lacked the staff, funds and spaces to handle a larger and more precarious student population which brought almost daily challenges to navigate.

The threads that have traced reaching policies throughout most of this thesis now once again guide the discussion in more detail below. The discussion is extended to consider the implications of the differences identified in this thesis for schools that are more exposed, relative to School B.

8.2 Pulling through the threads

8.2.1 Who

Differences in teaching and non-teaching staff across both schools were mainly quantitative, propped up by differentiated access to private funds for hiring extra help. School A had significantly supplemented public support staff numbers, hiring a team of maintenance and cleaning staff, staff in finance, academics and administration, some with specialist skills (e.g. the laboratory technician). School B's focus for the extra support personnel they did hire was indicative of their priorities, namely extra personnel for fee collection and follow up, and assistance with security and discipline.

The gap in extra teaching staff also significantly changed the profile of teachers' work between the two schools. In addition to different lesson loads (See Figure 5.1) in quantitative terms, the *qualities* of work differed between each school. School A had far more support staff to do administrative work, smaller class sizes which reduced assessment load, students with a more school-inclined habitus which eased disciplinary activities (which, when necessary, were taken on by prefects and senior staff) as well as fewer subjects per teacher, which eased the division of attention and planning across the curriculum. The objects they required for work were to hand, the information needed was easily available in multiple formats, and the infrastructure of the school was always at the ready for use.

School B teachers, by contrast, in addition to having far more actual lessons, also had far more students *in* each lesson, on average, making assessment a heavier load. They also had to fill in more administrative work for the school, were responsible for more frequent and more intense disciplinary duties, and more subjects on average to work across. Object use was brittle due to security concerns causing teachers to cling closely to their classrooms, and information dissemination about the school was erratic.

While School A teachers did not just 'take the extra time' to relax, what they did fill their days with was far more productive, running a rich array of extra-curricular activities, which produced further cultural and symbolic capital for the school. That is: teachers at both schools worked hard, but the difference between fortified and exposed was the profile of that work—how much conflictual activity (e.g. detention) it involved compared to constructive (e.g. extra-curricular activities), the differences in assessment load, and whether teachers' attention stayed on teaching and learning a specialised area of the curriculum (School A) vs. multiple competing activities and juggling several areas of curriculum (School B).

8.2.1.1 Implications for more exposed schools

Given that School B could still hire several extra teaching staff (See Table 6.5 “Differences in staffing at School A and School B”), the tightness in staffing experienced at School B opens up questions for even more exposed schools who are unable to hire extra teaching staff at all (predominantly no-fee schools in Q1-Q3 that serve the poorest of students). Tighter staffing would necessarily result in even heavier workloads and more fractured subject allocations than those at School B.

The PPN and timetables

The thread who, then, foregrounds the parity of post provisioning across all schools as deeply inequitable given what fortified schools can supplement. The weighting formulae in the PPN, which gives a tiny fraction of extra allowance based on students’ socio-economic status, results in at most one or two extra teachers per school, an allowance which does little to add elasticity to the timetables of exposed schools.

8.2.2 Whom

The student profiles across each school were also significantly different. The fee-paying capacity of students is discussed under with what below, but beyond the economic capital the students contributed to each school, they brought a vastly different type of habitus and cultural capital. School A’s students deviated from the school’s expectation less. The induction programme at School A dressaged them effectively into a tight relationship between timespace-conceived and timespace-lived. School A students mostly self-regulated when the teacher was absent, and moved quickly between classes with minimal intervention from teachers.

School B students had a far broader range of habitus, from those who were inclined to the ideals of monochronic schooling to those who resisted. While School B attempted to use dressage in the most extreme cases, a critical mass of students was sufficiently ‘off beat’ to make dressage for all infractions impossible and extremely bureaucratic (detention levels). In addition, students who brought the ‘ideal’ habitus for the timespace-conceived of schooling (and probably would’ve fitted in seamlessly at School A) found that this habitus was not a good fit for the micro-field at School B, where timetable instability started the year’s rhythm erratically, and spatial ossification combined with substitutions to keep students guessing where their class might actually be. Differentiating between student confusion and student deviation became almost impossible.

School A could rely on cultural capital and habitus from its students in ways that School B could not. As a fortified school, School A set the tempo and students kept in time, whereas at exposed School B, the students set the tempo and the school tried to shepherd this rhythm as best it could.

8.2.2.1 Implications for more exposed schools

While School B had a significant number of its students without the habitus for formalized clock-driven schooling, it still enrolled students across a spectrum. Schools that enrol students from even poorer backgrounds, or who cannot select as School B did, would find themselves with almost their entire student body out of sync with the timespace-conceived outlined in policy. While this may result in a more homogenous habitus amongst students than that at School B, the gap between timespace-lived and timespace-conceived in terms of everyday rhythm would be even greater.

The APOPS and the field of schooling

By enshrining market forces as the primary driver behind student enrolment, the APOPS currently allows schools to tacitly select easy-to-teach students, while claiming plausible deniability regarding discrimination based on race, gender, language or means. Marketized student distribution is known to increase stratification amongst schools (Ball, 2003) as students from dominant groups self-select together and students without capitals are left to cluster. In this sense, School B was more fortified than most schools, as it still attracted more students than it could accept and was able to select from these.

The admissions procedures as administered at the provincial level also allowed for tacit advantage on the part of socially dominant families who could plan ahead against stable employment and housing to strategize for early applications to desirable schools, while precarious families were left with whatever schools had spaces available once they were able to navigate application deadlines and processes, job arrangements and precarious residential circumstances.

The way in which these policies combine to reproduce advantage opens questions as to whether more explicit redress is not required of the APOPS at the national level, as well as how access for poor families can be improved when navigating the bureaucratic processes of school applications, without placing this burden of support on exposed schools as the admissions policy currently does.

8.2.3 What

Curriculum across each school was interpreted in subtly different ways. As previously mentioned, the need for language diversity was different at each school. Elective offerings at the FET level mostly overlapped, with School A offering a broader arts spread, and School B focusing on more commercial subject offerings. School A also offered more electives, while mandating its students to take one of physical science or life science for their NSC.

A larger difference in the two schools' interpretation of the timetable existed, surprisingly, at the lower secondary grades (Senior Phase: Grades 8 and 9). School A unbundled subjects into their constituent FET-aligned components (in violation of the national policy), allowing teachers to specialise further and allowing students to track their subject interests throughout high school with more focus. Despite this unbundling being technically illegal, School A was afforded the freedom to do so by its field position, which sheltered it from bureaucratic scrutiny.

School A, as a fortified school, was able to align the symbolic capital it produced to forms recognised by other related fields—namely higher education and economic demand for scarce skills. School A could also align high stakes electives with student selection processes, and could sustain this alignment by commanding a large pool of applicants with the appropriate habitus.

School B, however, as a more exposed school, offered far more subjects considered 'softer'. Such subjects carry less symbolic capital in the field of higher education and employment, but bolster the school's NSC pass rate (e.g. consumer studies, business studies). School B, however, was not totally exposed, and was still holding on to ambitions of higher symbolic capital through physical science, IT and economics, and holding off offering subjects considered 'extremely' soft e.g. Tourism.

School A leveraged its timetable elasticity to offer a selection of cultural capital that School B could not. Curriculum unbundling in the lower grades further strengthened School A's field position, allowing students with fringe interests such as music, art, French or drama to pursue these interests without affecting other students. School B had ambitions to respond to student interests similarly, but lack of staffing elasticity meant that this desire was met with strong internal resistance from teachers, especially amongst those who carried larger classes to allow for smaller electives.

8.2.3.1 Implications for more exposed schools

For exposed schools, maximising the symbolic capital of the school in the form of assessment results is in tension with maximising the cultural capital of the electives students choose. Schools maximise exam results by offering less high-value, supposedly easier subjects in which students are more likely to achieve good grades. Although such a tension could be seen as solely self-serving on the school's part, the reality is more complex: it is not in the students' interests either to attempt high-stakes subjects only to fail them.

Rather, exposed schools and their students come up against what Bourdieu (1974, 1990; Bourdieu & Passeron, 1990) described as the symbolic violence inherent in an inevitably non-neutral curriculum. Armed with an uncalibrated habitus, home languages not aligned with languages of instruction and assessment in the schooling system, poor socioeconomic support from the home, and/or rhythms unaccustomed to the specific logic of institutionalized schooling, exposed schools must muster Herculean efforts to master the same material in the same amount of time with even fewer resources compared to their fortified counterparts. If 'depreciating' the cultural capital through electives gets more students over the line, this is an understandable—albeit short-termist—strategy.

The NPPPR and ideal timespace

The effect created by the NPPPR, which mandates pushing students to the next grade when they have not met pass criteria, creates a cumulative learning backlog as students move through the system (Christie et. al 2007; Schollar, 2018). Classes with students who are more than a year's worth of curriculum apart in learning attainment are in fact the norm and not the exception in exposed schools. The concentration of a broad distribution of different learning achievements and rates within the same timespace of the lesson casts the work of teaching and learning as very different from the monochronic linear framing of the NPPPR, which not only posits timespace as an inert container of learning activity, but also assumes that learning could somehow be regulated *by* time irrespective of context or space.

The nature of what 'teaching an hour lesson' entails, then, is different across fortified and exposed contexts. In a fortified classroom such as those at School A, smaller groups of age-appropriate students with few learning backlogs can move together at a relatively homogenous learning pace. In exposed schools, like School B, an hour of teaching and learning involves a larger group of students of varied ages and prior attainment requiring multi-grade content differentiation. This, combined with a less school-inclined habitus,

means that an hour lesson in an exposed school requires far greater efforts from teachers and students, with fewer sources of cultural capital and often less conducive material space for the task. The types of practice required across the two types of schools are so different that they almost defy normative comparison.

The field arrangements that require schools to maximise Grade 12 results, along with a very narrow conceptualization of timespace in schooling and curriculum progression, means that the NPPPR becomes 'sticky' for exposed schools in ways it doesn't for fortified schools. 'Stickiness' in this sense refers to the trade-offs and compromises that exposed schools make to navigate their way through the policy's requirements, weighing up the potential implications for decisions made about curriculum offering, progression decisions, and student enrolment. The NPPPR's progression requirements and subject-time allocations create an enmeshment of timespace, cultural capitals and bureaucratic structures that assume the uniform, unencumbered and stable movement of students through school as the norm. This enmeshment places exposed schools in a position where decisions in the interests of individual students may not be in the interest of the school, and vice versa.

8.2.4 With what

School A and School B differed in two important respects regarding their capacity to access economic capital: School A could charge and collect far higher fee volumes than School B. Whereas School A saw fundraising activities as relatively minor contributions and perhaps useful for fringe activities, School B relied on fundraising for basic schooling activities. School B also was far more heavily dependent on rental income to supplement its purse. Both schools received the same per child allocation from the state.

The funding policies that underpin school fee charging and exemptions seem progressive on the surface, in that they allocate a minor amount more for children unable to pay fees. But beneath this surface lies another pseudo-marketized form of competition between schools. In Bourdieusian terms, the nature of the schooling field in South Africa pits schools against each other to attract and retain students who can sustainably pay high fees, and to use tacit (at times even unintentional) forms of exclusion to limit the fraction of students at the school who can't pay. Fees made up the lion's share of schools' supplementary income at both schools, and other forms of income such as rental or fundraising directly impinged on teaching and learning activities by distracting teachers or competing for school space. Fee raising remained, for both schools, a core activity, although School A was in such a fortified position as to be able to disavow money as an overt area of interest in ways that School B could not.

Economic capital's relation to timespace also made itself felt through liquidity issues. School B worried from one month to the next how SGB staff would be paid. School A had reserves of such extent that long term capital investment projects such as new buildings could be organised and executed. Precarity vs. stability further reinforced the arrhythmia or eurhythmia observed at each school respectively.

8.2.4.1 Implications for more exposed schools

The two schools examined for this study are far from the polar ends of the funding spectrum. Table 8.1 below indicates an *estimate* of each school's general location as situated along the axis of funding in South African public schooling for the year of this study.

Year: 2018	No. of students ⁷⁸	Private contributions				Public contributions ⁷⁹			Total financial capital for school	Total financial capital/ child	Liquid cash to hand per child
		Fees collected	Rental collected	Total	Per child	Cash stipend ⁸⁰	Total	Per child			
School A	910	R 30 310 300	R 305 178	R 30 615 478	R 33 643	R 207 480	R 15 015 000	R 16 500	R 45 630 478	R 50 143	R 33 643
School B	1018	R 11 500 000	R 2 150 000	R 13 650 000	R 13 409	R 232 104	R 16 797 000	R 16 500	R 30 447 000	R 29 909	R 13 409
No-fee (Q1, Q2, Q3)	1000	-	R -	R -	R -	R 1 316 000	R 17 500 000	R 17 500	R 17 500 000	R 17 500	R 1 316
No-fee w/ small rental	1000	-	R 100 000	R 100 000	R 100	R 1 316 000	R 17 500 000	R 17 500	R 17 600 000	R 17 600	R 1 416
No-fee w/ big rental	1000	-	R 1 000 000	R 1 000 000	R 1 000	R 1 316 000	R 17 500 000	R 17 500	R 18 500 000	R 18 500	R 2 316
Q4 w/o fees	1000	-	R 100 000	R 100 000	R 100	R 660 000	R 17 000 000	R 17 000	R 17 100 000	R 17 100	R 760
Q5 w/o fees	1000	-	R 100 000	R 100 000	R 100	R 228 000	R 16 500 000	R 16 500	R 16 600 000	R 16 600	R 328

Table 8.1 How School A and B's economic capital compares to other ordinary public schools in the South African basic education system.

⁷⁸ An average number of 1000 students per school was assumed for comparison purposes in this table.

⁷⁹ The average public expenditure per student was calculated by dividing the total national allocation for public education by the number of students enrolled. The difference between quintile allocations was then distributed around the average from this calculation. The specific details of teacher salary distributions are not available and hence calculating actual expenditure at that level was not possible. Teacher salary calculations would also not include the overhead costs of provincial and national government departments.

⁸⁰ This stipend was calculated by multiplying the non-personnel cash allocation from the NNSF as outlined in Table 6.2 by the number of students enrolled.

As mentioned in Chapter Four, School A and B were selected as telling rather than typical cases. Table 8.1 shows that despite collecting less than half the fees of School A, School B still does relatively well as compared to the 60% of schools designated as no-fee schools. The table also shows that School B's situation is precarious, as Q5 schools unable to collect fees are the most financially exposed of all.

Table 8.1 also explains how even when schools might manage to collect considerable monies through venue rental, this cannot compensate for the supplementation provided by fees. The table also does not give indications of the other strands i.e. adequacy of the spatial provisioning for the schools, the deviations by default that schools are susceptible to due to security concerns, or the backgrounds of the students that schools must prepare to perform at standardized assessments.

What Table 8.1 does suggest is that the elasticities available to the vast majority of schools in the country are far less than those of School B. While further research would be required to verify the qualities of the timetables at those schools, the forms of capital available to them do not augur timetables that can support rhythms of teaching and learning in exposed contexts.

The NNSF and elasticities

Underpinning the vast differentials in available capitals between fortified and exposed schools is the full breadth of the economic inequality prevalent in South Africa. While public provision is pro-poor by a small fraction (the difference of R1000 per child per year between wealthiest and poorest students), the differences in unregulated *private* supplementation allows parents and communities to bring the full extent of their private capital to the school. The NNSF supports this inequality both additively—by not sufficiently skewing public funding to compensate for private supplementation—as well as in its silence regarding any regulation of said private supplementation. The vast difference plays out not in a school's quintile allocation as intended, but in the division between schools that can *collect* fees and schools that cannot.

8.2.5 Where

The final thread that connected rhythms through the timetables of each school was space, both at infrastructural and broader geographic levels.

While both schools were endowed with similar architectural designs and built in a similar period, the differences in available spaces were significant between them. School A had used its access to economic capital to both maintain existing space, as well as expand new spaces for teaching and learning. School B, on the other hand, had to rely on publicly funded expansion projects from the WCED, and was struggling to maintain what infrastructure it already had.

Geographically, School A was further fortified by its middle-class student base and that group's relative ability to traverse the city using private forms of transport. School B's students also came from far afield, but relied heavily on failing forms of public transport that seeped into the school's rhythm. Neither school used zoning to shape its student intake, as both gathered more advantage by attracting as broad a field as possible of applicants, albeit from different geographic areas of the city.

8.2.5.1 The implications for more exposed schools

Spatial concerns for schools, who were never fortunate enough to be endowed with schools built for White students, continue to struggle with both their spaces for teaching and learning as well as the geographic distribution of their students. Both facets of space are most keenly felt in rural areas of South Africa in the old Bantustans (see Chapter One: also see Jacklin and Graaff, 1994). Urban exposed schools struggle with the legacy of deliberate under-development from apartheid planning which has never been redressed, alongside exposure to the issues present in the impoverished communities in which they are embedded. Rural exposed schools have even less legacy infrastructure and attract the poorest students from great distances with little public transport, an issue which has resulted in rural scholar transport receiving increased attention (Equal Education, 2016).

Once again, what differences existed in the analysis in this study between School A and School B are likely to be degrees of magnitude larger for more exposed schools that cannot supplement state provision. That spatial development and student-school spatial relations are still so hotly contested 25 years after the demise of apartheid is both testimony to the knot of spatiality that apartheid (and prior colonialism) created, and the importance of considering the practical implications of (temporal)spatial justice in education (Christie, 2013).

8.3 Producing and reproducing rhythms

The thesis has thus far built up a proposed conceptual and analytic mechanism for examining how forms of capital relate to rhythms of teaching and learning via the timetable. Not only can fortified schools build sustainable, stable timetables, but they are also able to continue doing so. The results produced by said rhythms continue to attract capital into the future.

The current field of schooling, then, in the South African context, supports cycles of fortification and exposedness.

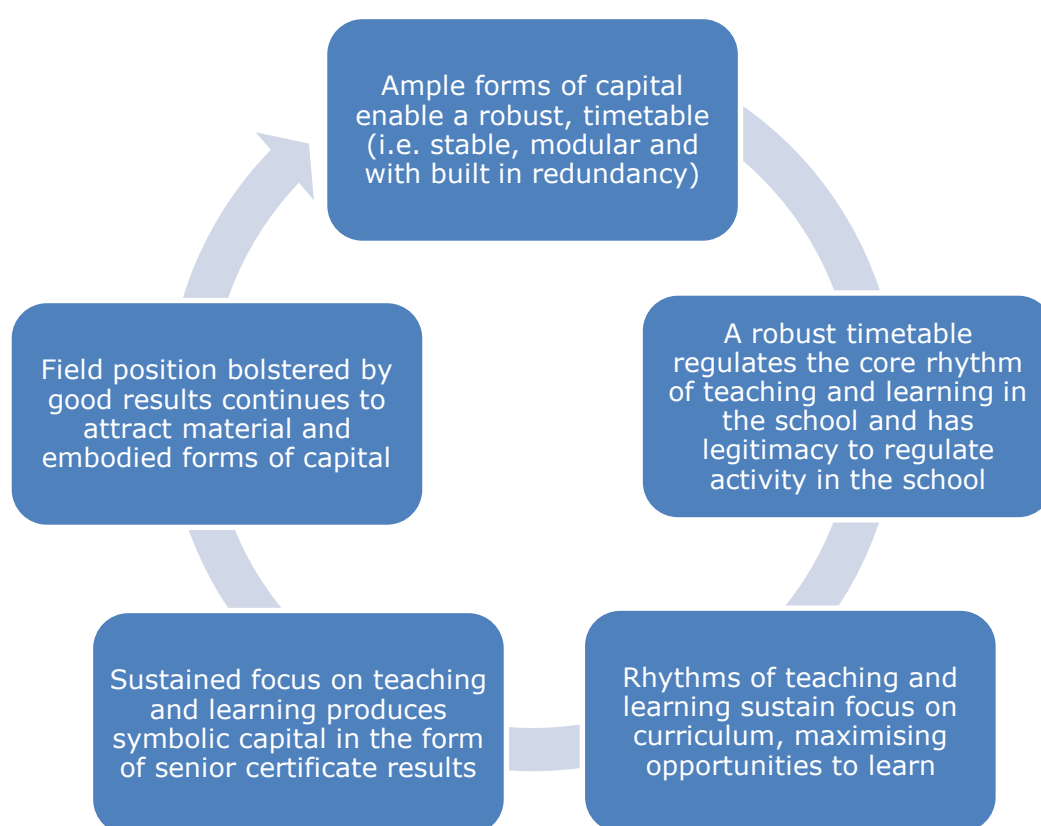


Figure 8.1 Reproducing fortification: cycles of capital accumulation.

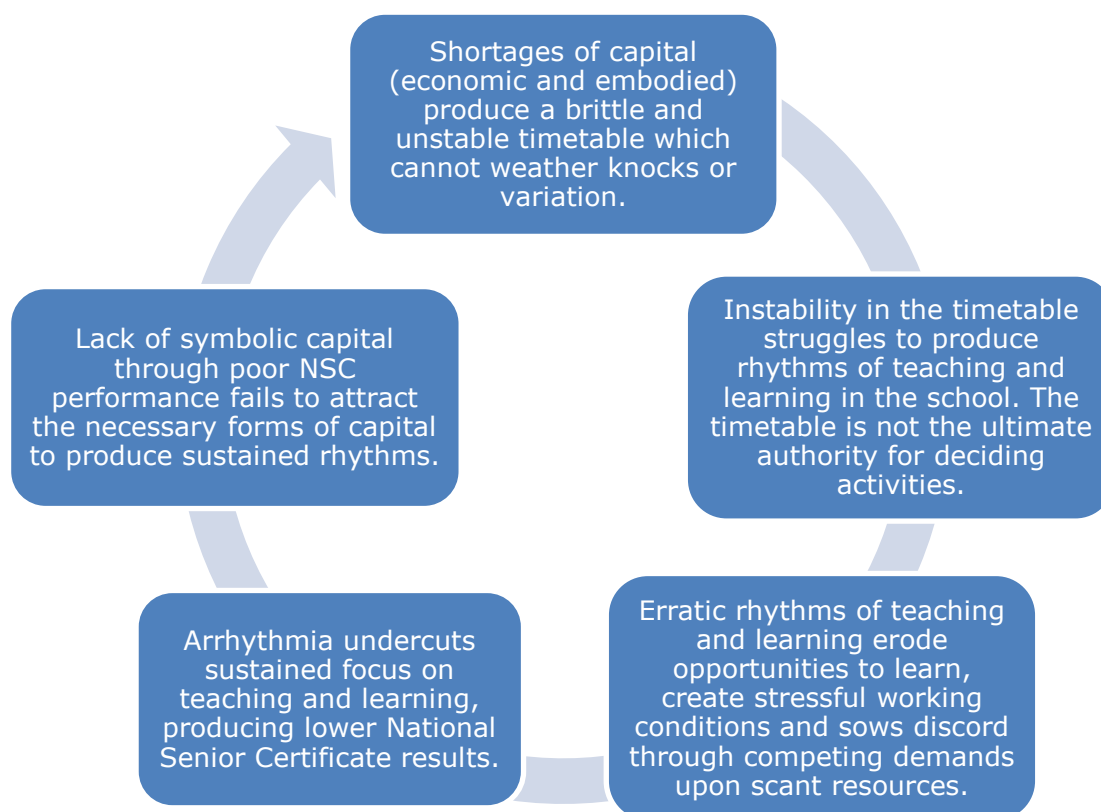


Figure 8.2 Reproducing exposedness: cycles of precarity.

Figure 8.1 and

Figure 8.2 detail the mechanism of reproducing rhythm via the timetable.

8.3.1 Elasticity as the shock-absorber protecting rhythm

Throughout the analyses of both schools, elasticity underpinned other aspects of the timetable to protect the rhythm of teaching and learning from interference. Adam (1999) argues such protection is the fundamental function of a school:

The task of all participants (at school) is to suspend their extended, multiple personal time-worlds and to enter collectively, under the guidance of the teacher, the time-world of the (lesson).

(Adam, 1999, p.110)

Adam's 'suspension' of the personal time-world requires fortification, which depends on elasticities. The carving out of timespace for *skholé* free from economic or other needs, requires a fortified space into which the vicissitudes and crises of students' or teachers' lives cannot penetrate, and into which rhythms of maintenance, of discipline and of broader social concerns (e.g. the traffic, or the drought) cannot make incursions.

Both schools suffered knocks during this study. What differentiated them were both the frequency of the knocks, and their ability to absorb these knocks and continue teaching and learning regardless. *Skholé*, then, is what fortified schools can muster and exposed schools cannot. Protected from the slings and arrows of the world by elasticities built with capital-at-work-through-timespace, fortified schools protect instructional time from distractions and immediate urgencies that would erode teaching and learning. Their access to multiple forms of capital, originating in both the past and present, cushions them and enables them to shelter their students' access to 'studious leisure'.

8.3.2 Complexifying exposedness: elasticity to different ends

The notion of exposedness has held a lot of water for this research, but this should not be mistaken to imply that all exposed schools suffer the exact same challenges. As was seen in this study, local contexts affect schooling heavily, but not homogenously (a finding echoed elsewhere in other research e.g. Lupton, 2005; Thrupp & Lupton, 2006). That is: while elasticities are necessary for localized responses to challenges, these responses are not standard and hence measurable using standardized outcomes. Rhythms and timespace elasticities provide a language to describe trends of (dis)advantage without homogenizing—or ignoring—schools' local contexts and challenges.

8.4 A rhythmic theory of change

The detailed data analyses in this study have attempted to outline the dynamic but stable relations between structures, activities and meaning-making in school everyday life. These relations together build a dominant rhythm, predictable and regular, but not determined.

While each school had its own dominant rhythm, it is clear from the differences between the two sites that not all rhythms produce or preserve social power. **Power-full rhythms**, then, could be said to be those rhythms that are in sync with the field in which they are playing out. A power-full rhythm has **momentum**: it gains and sustains a pace that, like a strong river current, is difficult for individuals to resist, and also challenging to change without significant intervention.

In the case of School A, the local field of the school was aligned with the broader field of formalized education and socio-economic power. The *illusio* of the school looked to the forms of capital recognised beyond the field of schooling; the actors in the school were themselves already socialized in families belonging mostly to dominant groups; and the students brought a *habitus* aligned to both the local school field and the field of broader power. Teachers and students at School A did not need to reconcile the local field with the broader one: they were aligned.

For School B, the local field of the school was at odds with what the education field at large required. What rhythms were power-full at the *local* level were not power-full at a broader level. A furtive, urgent, punctual rhythm at School B was not profitable: too much arrhythmia meant arriving on time was a hit-and-miss affair. Planning on long horizons, like School A did, was often a fruitless task, as too many knocks and unexpected events would scupper such plans, and the capitals required to pursue a more 'profitable' rhythm were not present.

A power-full rhythm, then, is also a relational idea. Rhythms are power-full in how they sustain practices that yield capitals in the field in which they are deployed. It is the reliability of such rhythms' reproduction of capitals that gives them momentum. But if the local field of the school (productive of, and produced by, its participants and material constraints) is asynchronous with the broader field of the education system, then locally power-full rhythms will not prove profitable beyond the school.

An outcome of this study, then, is a rhythmic theory of change where rhythmic inertia or momentum might be identified in relation to a field of practice.

8.4.1 Changing rhythms requires changing all three components of practice

The original rationale for this study was a concern for how change has been thought about in South African basic education. The literature review identified a gap in the theories of change about how to address inequality in South African schools. It was argued that existing analyses do not hold policy enactment in context so as to offer meaningful opportunities for change or plausible frames regarding the *necessary conditions of possibility* for change.

A rhythmic practice theory lens has brought a fresh approach. This lens has focused how efforts to change what teachers and students do crash up against structural and material constraints and entrenched ideas of what various activities and tasks mean. In the case of the exposed school examined, students and teachers trying to 'be where they should' and 'do what they should' came up against arrhythmia, born of timetable inelasticity and real material constraints generated by an internal security problem. Frustrations and differences over meaning reflected the contesting logics of the local school field (what makes sense *here*) and the logic of the broader field of education, with staff stretched over the exhausting and ubiquitous task of reconciling the two. The momentum of the power-full rhythm rolled on: changing it required more than a change of attitude or 'working harder'.

Some of the theories of change in South African education (some of which were discussed earlier in Chapter Three) can now be placed in relation to the cycle of precarity described in Figure 8.2. The Schools That Work report (2007) foregrounded how schools that produce NSC results despite exposedness do so by injecting enormous (unsustainable) investments of extra time, thereby producing rhythms of teaching and learning outside of the timetable. Theories of change that posit teacher agency and capacity as the issue attempt to encourage a focus on teaching and learning in the face of arrhythmia (e.g. Taylor and Vinjevold, 1999) ignoring the contextual factors that interrupt rhythm. The Hunter Report, (commissioned by the Department of Education in 1995 during the transitional government of national unity) attempted to disrupt the cycle at the point where producing symbolic capital in the form of NSC results attracted economic and cultural capital into schools, with proposals aimed at preventing the marketization of school enrolment. In summary: various existing theories of change have not yet considered how fortification or exposedness might be reproduced through the timetable, and hence their relation to this reproduction—or to each other—was not well theorised.

However, these existing theories of change should not be falsely assumed to be symmetrical in popularity or attempt. Interventions and theories of change premised on agency hold far more appeal, as they require less effort on the part of those in power (policymakers) and place the onus of change on teachers (Shalem, 2003). In discursive terms, structural changes are not in keeping with a neoliberal moment of economic austerity or shrinking of public investment in areas such as education. Thus, there continues to be a wealth of interventions and framings encouraging a focus on teaching and learning which ignore the material underpinnings of arrhythmia in schools.

What this study attempts to show is that changing only one facet of a practice is insufficient to shift the tempo of the dominant power-full rhythm with momentum. To return to the original issue outlined earlier: shifting activities and meanings alone—without changes in material constraints and the forms of capital available to schools—will not result in a new power-full, persistent rhythm. While it is not claimed that increasing the forms of capital schools have is a *sufficient* criterion for change (since shifts in activities and ideals are also required), a focus on timetables, including the invisible constraints they impose on rhythm, and how they are shaped by forms of capital, restores structural and material concerns to their rightful place *alongside* meaning and activities as all necessary prerequisites for changing schools' rhythms.

8.4.2 What should change: a normative question

Thus far, this study has attempted as far as possible to refrain from normative judgments on either school, their staff or students. Describing what *is* has proven illuminating without the need to prescribe.

However, the question regarding change is always a normative one. Thus far the argument has been made that the rhythms of exposed schools (of which School B is a mild example) are not in keeping with those of the broader education field and, by necessary extension, the broader field of social and economic power. If a gap exists between the logics and rhythms of the local school level and the logic of the education field at large, as has been suggested, the question of change takes a plural form. Individual schools must be capacitated to align with the broader field of education; but simultaneously, the field of education should adjust so that the rhythms of exposed schools—in particular the habitus and cultural resources of the vast majority of students that they serve—are less at odds with what schooling demands.

Bourdieu's various forms of capital and their relation to field enables a more complex formulation of change. Clearly material need underpins inelasticity as explored in this study. But cultural capital also mattered when considering the whom and the what of schooling. And considering timespace and its relation to habitus also exposed the tacit power at play when schools assume a rigid, mechanistic, monochronic timespace as ideal and viable.

Even if the dominant field of education is taken as given, exposed schools require far more access to forms of capital if they are to produce rhythms in keeping with this field. This study has suggested that teachers in exposed schools work in a kind of purgatory between the ideal timespace-conceived of the official policy and the timespace-lived of their contextual realities. Attempts to reconcile the two dissonant timespaces produce and reproduce arrhythmia, further eroding the timetable's hold on schooling rhythms.

The chasm between timespace-conceived as it manifests in the timetable and the everyday timespace-lived of exposed schools is widened by two oppositional forces: the first is a policy landscape which provides exposed schools with fewer forms of capital with which to fortify their timetables with elasticity, granularity and regularity; the second is the very nature of their exposedness i.e. their increased precarity regarding the vicissitudes of their students' lives and those of the broader social fabric. In essence: exposed schools must do much more with much less. Elastic, regular and modularized timetables would provide the conditions of possibility that Shalem suggests, as an insufficient—albeit necessary—prerequisite for change.

8.4.2.1 The thorny issue of adequacy

Considering what meaningful change might look like from a rhythmic perspective also opens up difficult questions regarding adequacy and its relation to context: what is *enough* to construct and hold a rhythm of teaching and learning? And is it the same for all, when the cultural resources of students differ so vastly? At the very least, should not exposed schools serving students from disadvantaged families be accorded *more* capital to support the rhythm of teaching and learning than their fortified counterparts? And even if this were possible, should the hegemonic logics of the field of education and power—set as they are by the dominant groups—remain unchallenged? While this study has not endeavoured to answer these concerns, it has suggested that timetables provide a consistent lens through which to begin exploring answers meaningfully across widely varied schooling contexts.

8.5 Conclusion

This study sought to identify the 'generative structures' (Bourdieu, 1990) inhibiting change in schools that serve the vast majority of South Africa's children. It focused on schooling rhythms, their relationship to the timetable, and in turn that artefact's roots in key policies.

The original questions of this thesis were:

1. What differences are visible in the timetables of a fortified secondary school compared to that of an exposed school?
2. How do these differences relate to policies that reach?
3. How, in turn, does the timetable regulate rhythms of teaching and learning?

The subsequent analysis has produced a rhythmic theory of change that grounds policy enactment and interaction in context using the timetable as the axis of teaching and learning rhythms. While further work is required to establish the efficacy of this lens in more exposed contexts than the ones analysed here, an analytical extension of the implications for exposed schools suggests expecting change in such schools under the conditions in which they currently operate is likely to result in wasteful expenditure of time and effort. Meaningful opportunities for change must be constructed so that exposed schools can find the time and space to forge new rhythms of teaching and learning for, and with, their students.

9.

References

- Abdal-Haqq, I. (1996). Making Time for Teaching Professional Development. *ERIC Clearing house on Teaching and Teacher Education* ED400259 Washington D.C. : ERIC Digest.
- Adam, B. (1990). *Time and Social Theory* New Jersey: Wiley & Sons.
- Adam, B. (1999). Un/Learning the Habits of Clock Time: Re-Vision Time for Time in Education. *Counterpoints* 62 THE EXTRA-ORDINARY SCHOOL: Parergonality & Pedagogy p103-128.
- Adkins, L. (2009). Sociological Futures: From Clock Time to Event Time. *Sociological Research Online*, 14(4), 1-5.
- Adler, J., & Reed, Y. (2002). Challenges of teacher development: An investigation of take-up in South Africa. Pretoria: Van Schaik.
- Adler, J., Pournara, C., Taylor, D., Thorne, B., & Moletsane, G. (2009). Mathematics and science teacher education in South Africa: A review of research, policy and practice in times of change. *African Journal of Research in Mathematics, Science and Technology Education*, 13(sup1), 28-46.
- Afriforum (2018, November). Newly-published feeder zones for Gauteng schools will cause major discomfort for 2020 school year. <https://www.afriforum.co.za/en/newly-published-feeder-zones-gauteng-schools-will-cause-major-discomfort-2020-school-year/>
- Alhadeff-Jones, M. (2019). Beyond space and time—conceiving the rhythmic configurations of adult education through Lefebvre's rhythmanalysis. *Zeitschrift für Weiterbildungsforschung*, 42(2), 165-181.
- Alhadeff-Jones, M. (2017). Time and the rhythms of emancipatory education: rethinking the temporal complexity of self and society London and New York: Routledge.
- Badat, S., & Sayed, Y. (2014). Post-1994 South African Education: The Challenge of Social Justice. *The ANNALS of the American Academy of Political and Social Science*, 65(2), 127-148.
- Ball, S. J., Hull, R., Skelton, M., & Tudor, R. (1984). The tyranny of the "devil's mill": Time and task at school. *Readings on interaction in the classroom*, 41-57.
- Ball, S. J. (1993). What is policy? Texts, trajectories and toolboxes. *The Australian Journal of Education Studies*, 13(2), 10-17.
- Ball, S. J. (1994). *Education reform : a critical and post structural approach*. Philadelphia: Open University Press.
- Ball, S. J. (2003). *Class strategies and the education market: the middle classes and social advantage*. London and New York: Routledge-Falmer Press.
- Ball, S. J. (2015). Education, governance and the tyranny of numbers. *Journal of Education Policy*, 30, 299-301.
- Benavot, A. (2004). A global study of intended instructional time and official school curricula, 1980—2000. Background paper prepared for the *Education for All Global Monitoring Report 2005, the Quality Imperative*. UNESCO.
- Benavot, A. and Gad, L. (2004). Actual instructional time in African primary schools: factors that reduce school quality in developing countries. *Prospects* 34(3) p291-310.
- Biesta, G.J.J. (2013a). *The beautiful risk of education*. London and New York: Routledge.

- Biesta, G.J.J. (2013b). Time Out: Can Education Do and Be Done Without Time? In: *Education and the Political*. 75-88. Brill Sense.
- Bissell, J. (2004). Teachers' construction of space and place: the method in the madness. *FORUM* 46(1) 28–32.
- Blue, S. (2017). Institutional rhythms: Combining practice theory and rhythmanalysis to conceptualise processes of institutionalisation. *Time & Society*, 0961463X17702165.
- Bourdieu, P. (1967). Systems of education and systems of thought. *International Social Science Journal* 19(3) 338-352.
- Bourdieu, P. (1974). The school as a conservative force: scholastic and cultural inequalities. In: Eggleston, J. (ed.) *Contemporary research in the sociology of education*, Methuen, 32-46.
- Bourdieu, P. (1977). *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Bourdieu, P. (1984). *Distinction: a social critique of the judgement of taste*. (Richard Nice, trans.) London and New York: Routledge.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.) *Handbook of Theory and Research for the Sociology of Education*. New York, Greenwood, 241-258.
- Bourdieu, P. (1990). *The Logic of Practice*. (Richard Nice, trans.) Stanford: Stanford University Press.
- Bourdieu, P. (1998). *Practical reason: On the theory of action*. Stanford: Stanford University Press.
- Bourdieu, P. (2000). *Pascalian Meditations*. (Richard Nice, trans.) Stanford: Stanford University Press.
- Bourdieu, P. (2003). *Firing back: against the tyranny of the market 2*. New York: The New Press.
- Bourdieu, P. (2004a). *Sketch for a self analysis* (Richard Nice, trans.) London and Chicago: University of Chicago Press.
- Bourdieu, P. (2004b). From the King's House to the Reason of State: A Model of the Genesis of the Bureaucratic Field. *Constellations*, 11(1), 16-36.
- Bourdieu, P. (2008). *Political Interventions: social science and political action* (David Fernbach, trans.) London and New York: Verso books.
- Bourdieu, P. and Passeron, J-C. (1990). *Reproduction in Education, Society and Culture*. (Richard Nice, trans.) London: Sage Publications.
- Bourdieu, P. and Wacquant, L. (1992). *An invitation to reflexive sociology*. Cambridge: Polity Press.
- Bourdieu, P. et. al. (1993/1999). *The Weight of the World: Social suffering in contemporary society*. (Priscilla Parkhurst Ferguson, Susan Emanuel, Joe Johnson and Shoggy T. Waryn, trans.) Cambridge: Polity Press.
- Burawoy, M., & Von Holdt, K. (2012). *Conversations with Bourdieu: the Johannesburg moment*. New York: NYU Press.
- Byrne, O. (1847). *The first six books of the Elements of Euclid: in which coloured diagrams and symbols are used instead of letters for the greater ease of learners*. William Pickering.
- Calhoun, C. (2002). Pierre Bourdieu in context. Paper developed from speeches presented at New York University, the University of Pennsylvania, and the New School for Social Research. <http://www.nyu.edu/classes/bkg/objects/calhoun.doc>.

- Carnoy, M. (2008). Lessons from the past two decades: Investment choices for education and growth. In G. Bloch, L. Chisholm, B. Fleisch, & M. Mabizela (Eds.), *Investment Choices for South African Education*. Johannesburg: Wits University Press.
- Carnoy, M., Khavenson, T., Loyalka, P., Schmidt, W. H., & Zakharov, A. (2016). Revisiting the relationship between international assessment outcomes and educational production. *American Educational Research Journal*, 53(4), 1054-1085.
- Carter, P. (2016). Time tactics: Project managing policy implementation in a network. *Time & Society*, 28(2), 721-742.
- Cattaneo, M. A., Oggenfuss, C., & Wolter, S. C. (2017). The more, the better? The impact of instructional time on student performance. *Education economics*, 25(5), 433-445.
- Chisholm, L. (2012). Apartheid education legacies and new directions in post-apartheid South Africa. *Storia delle donne*, 8(1), 81-103.
- Chisholm, L. (2004). *Changing Class: Education and social change in post-apartheid South Africa*. Pretoria: HSRC Press.
- Chisholm, L., Hoadley, U., & wa Kivulu, M., Brookes, H., Prinsloo, C. Kgobe, A, Mosia, D. Narsee, H. and Rule, S. (2005). *Educator Workload in South Africa*. Report prepared for the Education Labour Relations Council. Pretoria: HSRC Press.
- Christie, P. (1998). Schools as (dis)organisations: The 'breakdown of the culture of learning and teaching' in South African schools. *Cambridge Journal of Education*, 28(3), 283-300.
- Christie, P. (2008). *Opening the doors of learning: Changing schools in South Africa* (p. 18). Johannesburg: Heinemann.
- Christie, P. (2013). Space, place, and social justice: developing a rhythmanalysis of education in South Africa. *Qualitative Inquiry*, 19(10), 775-785.
- Christie, P., Potterton, M. & Butler, D. (2007). Ministerial Report: Schools That Work. Pretoria: DBE
- Clark, J. (2015) Subject choice in the FET band: a proxy for disadvantage? *Schools Improvement Initiative Khayelitsha Briefing Document 7*. Accessed from https://webcms.uct.ac.za/sites/default/files/image_tool/images/271/News/Current/SII/SII%20KHAYELITSHA%20BD%207-%20Subject%20Choice.doc
- Colley, H., Henriksson, L., Niemeyer, B., & Seddon, T. (2012). Competing time orders in human service work: towards a politics of time. *Time & Society*, 21(3), 371-394.
- Cowley, S. J. (1994). Conversational functions of rhythmical patterning: a behavioural perspective. *Language and Communication*, 14(4), 353-376.
- Darling-Hammond, L. & McLaughlin, M. W. (2003). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76(8), 597-604.
- De Clercq, F. (2013). Professionalism in South African education: The challenges of developing teacher professional knowledge, practice, identity and voice. *Journal of Education*, 57(2013), 31-54.
- De Clercq, F. (2008). Teacher quality, appraisal and development: The flaws in the IQMS. *Perspectives in education*, 26(1), 7-18.
- De Clercq, F. (1997). Policy intervention and power shifts: an evaluation of South Africa's education restructuring policies. *Journal of Education Policy*, 12(3), 127-146.
- Deleuze, G. (1991). *Empiricism and Subjectivity: An Essay on Hume's Theory of Human Nature*. New York: Columbia University Press.
- Department of Education (1996a). South African Schools Act, 1996 (No. 84 of 1996). Government Gazette 34620, Pretoria: Government Printing Works.

- Department of Education (1996b). National Education Policy Act, 1996 (No. 27 of 1996). Government Gazette 34620. Pretoria: Government Printing Works.
- Department of Education (1997). National Education Policy Act (27/1996): Language in Education Policy. Government Gazette 19971. Pretoria: Government Printer.
- Department of Education (1998a). Employment of Educators Act, 1998 (No. 76 of 1998). Government Gazette 34620. Pretoria: Government Printer.
- Department of Education (1998b). National Education Policy Act (27/1996): Admissions Policy for Ordinary Public Schools. Government Gazette 19377. Pretoria: Government Printer.
- Department of Education (2006a). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 29179. Pretoria: Government Printer.
- Department of Education (2006b). South African Schools Act (84/1996): Regulations relating to the exemption of parents from payment of school fees in public schools. R1052. Government Gazette 29311. Pretoria: Government Printer.
- Department of Education (2007). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 30322. Pretoria: Government Printer.
- Department of Education (2008). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 31498. Pretoria: Government Printer.
- Department of Education (2009). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 32772. Pretoria: Government Printer.
- Department of Basic Education (2010). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 33723. Pretoria: Government Printer.
- Department of Basic Education (2011). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 34803. Pretoria: Government Printer.
- Department of Basic Education (2012). National Education Policy Act (27/1996): National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R—12. Government Gazette 36042. Pretoria: Government Printer.
- Department of Basic Education (2013a). South African Schools Act (84/1996): Regulations relating to minimum uniform norms and standards for public school infrastructure. Government Gazette 37081. Pretoria: Government Printer.
- Department of Basic Education (2013b). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 36222. Pretoria: Government Printer.
- Department of Basic Education (2014). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 37230. Pretoria: Government Printer.
- Department of Basic Education (2015). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 38397. Pretoria: Government Printer.
- Department of Basic Education (2016a). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 40065. Pretoria: Government Printer.

- Department of Basic Education (2016b). Employment of Educators Act (76/1998): Personnel Administrative Measures. Government Gazette 39684. Pretoria: Government Printer.
- Department of Basic Education (2017). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 40818. Pretoria: Government Printer.
- Department of Basic Education (2018). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 41420. Pretoria: Government Printer.
- Department of Basic Education (2019). South African Schools Act (84/1996): Amended national norms and standards for school funding. Government Gazette 42445. Pretoria: Government Printer.
- Du Toit, A. (2012) Making sense of 'evidence': notes on the discursive politics of research and pro-poor policy making. *PLAAS Working Papers*. Accessed from: <http://repository.uwc.ac.za/handle/10566/4485>
- Elden, S. (2004). 'Introduction' in H. Lefebvre, *Rhythmanalysis: space, time and everyday life*, London: Bloomsbury Academic, 1-9.
- Elliott, S., Ngo McKelvy, J. and Bowen, S. (2017). Marking time in ethnography: uncovering temporal dispositions. *Ethnography*, 18(4), 556-576.
- Equal Education, (2016). Scholar transport campaign. <https://equaleducation.org.za/campaigns/scholar-transport/>
- Equal Education, (2018). Implementing Agents Report: the middlemen in charge of building schools. Accessed from: <https://equaleducation.org.za/wp-content/uploads/2018/11/Equal-Education-Implementing-Agents-Report-November-2018.pdf>
- Fataar, A. (2007). Schooling, youth adaptation, and translocal citizenship across the post-apartheid city. *Journal of Education*, 43, 9-32.
- Fataar, A. (2009). Schooling subjectivities across the apartheid city. *Africa Education Review*, 6(1), 1-18.
- Ferrare, J. J., & Apple, M. W. (2010). Spatializing critical education: Progress and cautions. *Critical Studies in Education*, 51(2), 209-221.
- Fieulaine N., Apostolidis T. (2015) Precariousness as a Time Horizon: How Poverty and Social Insecurity Shape Individuals' Time Perspectives. In: Stolarski M., Fieulaine N., van Beek W. (eds) *Time Perspective Theory; Review, Research and Application*. Springer, Cham
- Fiske, E. B., & Ladd, H. F. (2004a). Balancing public and private resources for basic education: school fees in post-apartheid South Africa. *Changing class: Education and social change in post-apartheid South Africa*, 57-88.
- Fiske, E. B., & Ladd, H. F. (2004b). *Elusive equity: Education reform in post-apartheid South Africa*. Pretoria: HSRC Press.
- Fitzpatrick, T. (2004). Social policy and time. *Time & Society*, 13(2-3), 197-219.
- Fleisch, B. (2008). "Introduction". In Bloch, G., Chisholm, L., Fleisch, B. and Mabizela, M. (Eds.) *Investment choices for South African education*. Johannesburg: Wits University Press.
- Foucault, M. (1977). *Discipline and punish: the birth of the prison*. New York: Vintage books.
- Franke, F. (2015). Is work intensification extra stress? *Journal of Personnel Psychology*, 14(1), 17-27.

- Fröm, J., Holmgren, C., Andersson, H., & Ahl, A. (2003). Are timetable-free schools possible? *European Educational Research Journal*, 2(4), 547-558.
- Gell, A. (1992). *The anthropology of time: Cultural constructions of temporal maps and images* (p. 90). Oxford: Berg.
- Gilmour, D., & Soudien, C. (2009). Learning and equitable access in the Western Cape, South Africa. *Comparative Education*, 45(2), 281-295.
- Graven, M. (2005). Dilemmas in the design of in-service education and training for mathematics teachers. In: Vithal, R., Adler, J. & Keitel, C. (eds.) *Researching Mathematics Education in South Africa: Perspectives, Practices and Possibilities*. Pretoria: HSRC Press, p.206-232.
- Grenfell, M. and James, D. (1998). *Bourdieu and education: acts of practical theory*. Abingdon: Falmer Press.
- Gulson, K. N., & Symes, C. (2007). Knowing one's place: space, theory, education. *Critical studies in education*, 48(1), 97-110.
- Hall, K. (2018). Grade progression: statistics on children in South Africa. Retrieved from <http://childrencount.uct.ac.za/indicator.php?domain=6&indicator=61>.
- Hanushek, E. A. (1997). Assessing the effects of school resources on student performance: An update. *Educational evaluation and policy analysis*, 19(2), 141-164.
- Hanushek, E. A. (2006). School resources. In Hanushek, E. A. & Welch, F. (eds.) *Handbook of the Economics of Education*, Vol. 2, Elsevier, 865-908.
- Hanushek, E. A. (2015). Time in education: an introduction. *The Economic Journal*, 125(588), 394-396.
- Hargreaves, A., Lieberman, A., Fullan, M. & Hopkins, D. (1998). *International Handbook of Educational Change*, Vol 1. & 2. Dordrecht: Kluwer Academic Publishers.
- Harvey, D. (1989). *The condition of postmodernity*. Oxford: Blackwell.
- Hawking, S. (1988). *A brief history of time: from the big bang to black holes*. London: Bantam Press.
- Heugh, K. (2002). The case against bilingual and multilingual education in South Africa: laying bare the myths: Many languages in education: issues of implementation. *Perspectives in education*, 20(1), 171-196.
- Hlwatshayo, S. A. (2000). *Education and independence: education in South Africa, 1658-1988*. London: Greenwood Press.
- Hoerskool Overvaal v Head of Department of Education (2018). High Court of South Africa, Gauteng Division, Pretoria, Case No. 86367/2017. Accessed from: <https://www.politicsweb.co.za/documents/horskool-overvaal-vs-panyaza-lesufi-the-high-court>
- Hunter, A. P. (1995) Report of the Committee to Review the Organisation, Governance and Funding of Schools ("The Hunter Report"). *South African committee to review the organisation, governance and funding of schools*. Pretoria: Department of Education.
- Hunter, M. (2010). Racial desegregation and schooling in South Africa: contested geographies of class formation. *Environment and Planning A*, 42(11), 2640-2657.
- Hunter, M. (2015). Schooling choice in South Africa: The limits of qualifications and the politics of race, class and symbolic power. *International Journal of Educational Development*, 43, 41-50.
- Hunter, M. (2016). The Race for Education: Class, White Tone, and Desegregated Schooling in South Africa. *Journal of Historical Sociology*, 29(3), 319-358.

- Isensee, F. (2019). 'From Batavia to North Denver – US-American urban contexts as spaces of school organization experiments in the long 19th century.' Paper presented to International Standing Committee for History of Education, ISCHE 41, Porto, Portugal. 17-20 July 2019.
- Jacklin, H. (2004a). Repetition and difference: A rhythm analysis of pedagogic practice. *Unpublished doctoral thesis, University of the Witwatersrand.*
- Jacklin, H. (2004b). Discourse, interaction and spatial rhythms: locating pedagogic practice in a material world. *Pedagogy, Culture and Society*, 12(3), 373-398.
- Jacklin, H. (1991). *Shack Schools for Shack Settlements: A Study of DET Policies and Practices Relating to the Provision of School Facilities in Shack Settlements in the PWV Area* (Masters dissertation, University of the Witwatersrand).
- Jacklin, H., & Graaff, J. (1994). Rural Education in South Africa: A Report on Schooling in the Bantustans. *Unpublished report.*
- Jackson, C. K., Johnson, R. C., & Persico, C. (2015). The effects of school spending on educational and economic outcomes: Evidence from school finance reforms. *The Quarterly Journal of Economics*, 131(1), 157-218.
- Jansen, J. (2001). Explaining non-change in education reform after apartheid: political symbolism and the problem of policy implementation. In: Sayed, Y. and Jansen, J. (eds) *Implementing education policies: the South African experience*. Cape Town: UCT Press, 271-292.
- Jansen, J. D., & Christie, P. (1999). *Changing curriculum: Studies on outcomes-based education in South Africa*. Cape town: Juta and Company Ltd.
- Jenkins, R. (2002). *Pierre Bourdieu*. Psychology Press.
- Johnsson, M. C. (2012). Sensing the tempo-rhythm of practice: The dynamics of engagement. In: Hager, P. et. al. (eds.) *Practice, Learning and Change: Practice-Theory Perspectives on Professional Learning*. Dordrecht: Springer, 51-65.
- Kallaway, P. (2009). Dilemmas of public education policy in contemporary SA: political, academic and professional views. *Address at the Schools Development Unit, University of Cape Town*. Cape Town, Western Cape, South Africa. UCT: African Studies Collection.
- Kapp, R. (2004). 'Reading on the Line': An Analysis of Literacy Practices in ESL Classes in a South African Township School. *Language and education*, 18(3), 246-263.
- Karlsson, J. (2004a). An uneasy future: spatial changes in one school in South Africa. *FORUM*, 46(1), 9-12.
- Karlsson, J. (2004b). Schooling space: where South Africans learnt to position themselves within the hierarchy of apartheid society. *Pedagogy, Culture and Society* 12(3) p. 327-346.
- Kipfer, S. (2009). Preface to the new edition. In: Henri Lefebvre, *Dialectical Materialism*. Minneapolis: University of Minnesota Press, 8-32.
- Klein, J. (2004). Planning middle school schedules for improved attention and achievement. *Scandinavian Journal of Educational Research*, 48(4), 441-450.
- Krueger, A. B. (2003). Economic considerations and class size. *The Economic Journal*, 113(485), 34-63.
- Lefebvre, H. (2004). *Rhythmanalysis: Space, time and everyday life* (Stuart Elden and Gerald Moore, trans.). London: Bloomsbury Academic.
- Lefebvre, H. (1991). *The Production of Space* (Donald Nicholson-Smith, trans.). Oxford and Cambridge: Blackwell Publishers.

- Lefebvre, H. (2014). *Critique of Everyday Life: The Three-Volume Text* (John Moore and Gregory Elliott, trans.). London and New York: Verso Books.
- Levy, B., Cameron, R., Hoadley, U., & Naidoo, V. (Eds.). (2018). *The Politics and Governance of Basic Education: A Tale of Two South African Provinces*. Oxford University Press.
- Lewin, K. (2007). Improving Access, Equity and Transitions in Education: Creating a Research Agenda. In: *CREATE PATHWAYS TO ACCESS Research Monograph No 1*. University of Sussex: Centre for International Education.
- Lingard, B. (2011). *Policy as numbers: ac/counting for educational research*. *The Australian Educational Researcher*, 38(4), 355–382.
- Lingard, B., & Gale, T. (2007). The emergent structure of feeling: what does it mean for critical educational studies and research?. *Critical studies in education*, 48(1), 1–23.
- Lingard, B. & Thompson, G. (2017). Doing time in the sociology of education *British Journal of Sociology of Education* 38(1) p1–12.
- Lungu, G. F. (2001). The educational policy process in post-apartheid South Africa: an analysis of structures. In: Sayed, Y. and Jansen, J. (eds.) *Implementing education policies: the South African experience*. Cape Town: UCT Press, 92–97.
- Lupton, R. (2005). Social justice and school improvement: improving the quality of schooling in the poorest neighbourhoods. *British educational research journal*, 31(5), 589–604.
- Manganyi, N.C. (2001). Public policy and the transformation of education in South Africa. In: Sayed, Y. and Jansen, J. (eds.) *Implementing education policies: the South African experience*. Cape Town: UCT Press, 25–37.
- Mail & Guardian, (2018a, November). Gauteng feeder zones expanded to 30 km. Accessed from: <https://mg.co.za/article/2018-11-16-00-gauteng-school-feeder-zones-expanded-to-30km>
- Mail & Guardian, (2018b, December). This is how feeder zones will work. <https://mg.co.za/article/2018-12-14-00-feeder-zone-rules-must-go-ahead>
- Maphosa, C., Mutekwe, E., Machingambi, S., Wadesango, N., & Ndofirepi, A. (2012). Teacher accountability in South African public schools: a call for professionalism from teachers. *Anthropologist*, 14(6), 545–553.
- Massey, D. (1992). Politics and space/time. *New Left Review*, 65–84.
- Mathisen, A. (2015). Rhythms in education and the art of life: Lefebvre, Whitehead and Steiner on the art of bringing rhythmical transformations into teaching and learning—Part I. *Research on Steiner Education*, 6(2), 36–51.
- Mathisen, A. (2016). Rhythms as a pedagogy of becoming: Lefebvre, Whitehead and Steiner on the art of bringing rhythmical transformations into teaching and learning—Part II. *Research on Steiner Education*, 6(2), 52–67.
- Maton, K. (2014). Habitus. In: M. Grenfell (ed.). *Pierre Bourdieu: Key concepts*. London: Routledge.
- Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review*, 62(3), 279–300.
- Maxwell, J. A. (2006). Literature reviews of, and for, educational research: a commentary on Boote and Beile's "Scholars before researchers". *Educational Researcher*, 35(9), 28–31.
- Maxwell, J. A. (2008). Designing a qualitative study. In Bickman, L. and Rog, D. J. (Eds.) *The Sage handbook of applied social research methods*. London: Sage.
- Maxwell, J. A. (2012). *A realist approach for qualitative research*. Los Angeles: Sage.

- May, J. & Thrift, N. (2001). Introduction. In: J. May and N. Thrift (eds.) *Timespace: Geographies of Temporality*. London: Routledge.
- McGregor, J. (2003). Making spaces: teacher workplace topologies. *Pedagogy, Culture and Society*, 11(3), 353-378.
- McGregor, J. (2004a). Space, power and the classroom. *FORUM*, 46(1), 13-18.
- McGregor, J. (2004b). Editorial. *FORUM*, 46(1), 1-5.
- McLaughlin, M. W. (1987). Learning from experience: Lessons from policy implementation. *Educational evaluation and policy analysis*, 9(2), 171-178.
- Merrifield, A. (2006). *Henri Lefebvre: A critical introduction*. New York and Abingdon: Routledge.
- Middleton, S. (2014). *Henri Lefebvre and education: space, history, theory*. London and New York: Routledge.
- Mills, C. (2008). Reproduction and transformation of inequalities in schooling: the transformative potential of the theoretical constructs of Bourdieu. *British Journal of Sociology of Education*, 29(1), 79-89.
- Minister of Basic Education and others v Equal Education and Amatolaville Primary School (2018). Constitutional Court of South Africa, CCT 209/18. Accessed from: <https://equaleducation.org.za/wp-content/uploads/2018/11/Minister-of-Basic-Education-and-Others-v-EE-Amatolaville-Norms-2-November-2018-1.pdf>
- Moran, C. (2015). Time as a social practice. *Time & Society*, 24(3), 283-303.
- Motala, E. (2001). Policy analysis capacity in South Africa. In: Sayed, Y. and Jansen, J. (eds.) *Implementing education policies: the South African experience*. Cape Town: UCT Press. 240-250.
- Motala, S. (2005). Finance Equity in the South African Schooling System. In: Motala, S. and Pampallis, J. (eds.) *Governance and Finance in the South African Schooling System: The first decade of democracy*. Johannesburg: Centre for Education Policy Development.
- Motala, S. (2009). Privatising public schooling in post-apartheid South Africa-equity considerations. *Compare*, 39(2), 185-202.
- Motseke, M. (2019). Managing ill-discipline among learners in disadvantaged schools. *Africa Education Review*. <https://doi.org/10.1080/18146627.2019.1588747>
- Ngcobo, T., & Tikly, L. P. (2010). Key dimensions of effective leadership for change: A focus on township and rural schools in South Africa. *Educational Management Administration & Leadership*, 38(2), 202-228.
- Nespor, J. (2002). Studying the spatialities of schooling (review of T. Gordon, J. Holland and E. Lahelma, *Making spaces: citizenship and difference in schools*). *Pedagogy, Culture & Society*, 10(3), 483-492.
- Nicolini, D. (2003) Introduction. In Nicolini, D., Gherardi, S., & Dvora, Y. (Eds.) *Knowing in organisations: a practice-based approach*. Armonk, N.Y. : M.E. Sharpe.
- OECD (2019) *Teaching and Learning International Survey (TALIS)*. Accessed from: <http://www.oecd.org/education/talis/>
- Olivier, M. A. J., & Venter, D. J. L. (2003). The extent and causes of stress in teachers in the George region. *South African Journal of Education*, 23(3), 186-192.
- Omari, M. & Paull, M. (2015). Public sector work intensification and negative behaviours. *Journal of Organizational Change Management*, 28(4), 603-613.
- Orellana, M. F. & Thorne, B. (1998). Year-round schools and the politics of time. *Anthropology and Education Quarterly* 29(4), 446-472.

- Paechter, C. (2004). Power relations and staffroom spaces. *FORUM*, 46(1), 33-35.
- Paškvan, M. Kubicek, B., Prem, R. and Korunka, C. (2016). Cognitive appraisal of work intensification. *International Journal of Stress Management*, 23(2), 124-146.
- Philipp, R. A. (2007). Mathematics teachers' beliefs and affect. In F. K. Lester (ed.), *Second Handbook of Research on Mathematics Teaching and Learning* (Vol. 1). USA: Information Age Publishing, 257-315.
- Pienaar, R., & McKay, T. M. (2014). Mapping socio-economic status, geographical location and matriculation pass rates in Gauteng, South Africa. *Perspectives in Education*, 32(1), 105-123.
- Reddy, V., Prinsloo, C., Netshitangani, T. Moletsane, R., Juan, A. and Janse van Rensburg, D. (2010). An Investigation into educator leave in the South African ordinary public schooling system. Research commissioned by UNICEF for the Department of Basic Education, South Africa. Pretoria: HSRC Press.
- Reid, R. (1990). Time and teachers: an empirical and conceptual study of the competition for the available time in the classroom practice of teachers working in the Western Cape, 1989-1990. *Unpublished Masters thesis, University of Cape Town*.
- Republic of South Africa (1997). Abolition of Corporal Punishment Act (No. 33 of 1997). Government Gazette 18256. Pretoria: Government Printing Works.
- Republic of South Africa (1996). Constitution of the Republic of South Africa (No. 108 of 1996). Pretoria: Government Printing Works.
- Ritchie, S., & Crawford, G. (2009). Time Is of the Essence. Issues in PreK-3rd Education. Number Five. *FPG Child Development Institute*.
- Rovelli, C. (2018). The order of time. London: Penguin.
- SALDRU (2019) Income Comparison Tool, Southern African Labour and Development Research Unit, University of Cape Town. <https://www.saldru.uct.ac.za/income-comparison-tool/>
- Sayed, Y., & Motala, S. (2009). No fee schools in South Africa. *Policy brief (7). Consortium for Research on Education, Access, Transitions & Equity*. Sussex: Sussex University.
- Sayed, Y. (2001). Post-apartheid educational transformation. In: Sayed, Y. and Jansen, J. (eds) *Implementing education policies: the South African experience*. Cape Town: UCT Press. 250-270.
- Schatzki, T. R. (2010). The timespace of human activity: on performance, society, and history as indeterminate teleological events. Lexington: Lexington Books.
- Schmidt, C., Collette, F., Cajochen, C. & Peigneux, P. (2007). A time to think: circadian rhythms in human cognition. *Cognitive Neuropsychology*, 24(7), 755-789.
- Schollar, E. (2018). Curriculum management, improving learner performance and the rise of multi-grade classes: a tangled web of challenges to the design, operation and evaluation of educational development programmes in South Africa. In: Christie, P. and Monyokolo, M. (Eds). *Learning about sustainable change in education in South Africa: the Jika iMfundo campaign 2015—2017*. Johannesburg: SAIDE, 99-124.
- Schwartz, B. (1974). Waiting, exchange, and power: The distribution of time in social systems. *American Journal of Sociology*, 79(4), 841-870.
- Schwartz, B. (1978). The social ecology of time barriers. *Social Forces*, 56(4), 1203-1220.
- Scott, S. (2018). A sociology of nothing: Understanding the unmarked. *Sociology*, 52(1), p3-19.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA, US: Houghton, Mifflin and Company.

- Shalem, Y. (2003). Do we have a theory of change? Calling change models to account. *Perspectives in Education*, 21(1), 29-49.
- Silbert, P. (2012). *THE IMAGINED LEARNER IN NEOLIBERAL TIMES: Constructions of the South African learning subject in education policy discourse and school practice*. (Doctoral dissertation, University of Cape Town).
- Silbert, P., & Jacklin, H. (2015). "Assembling" the Ideal Learner: The School Assembly as Regulatory Ritual. *Review of Education, Pedagogy, and Cultural Studies*, 37(4), 326-344.
- Soudien, C., Jacklin, H. & Hoadley, U.K. (2001). Policy values: Problematizing equity and redress in education. In: Y. Sayed & J. Jansen (eds) *Implementing education policies: The South African experience*. Cape Town: UCT Press, 78-91.
- Soudien, C. (2004). Constituting the class: An analysis of the process of 'integration' in South African schools. In: Chisholm, L. (ed.) *Changing class: Education and social change in post-apartheid South Africa*, 89-114.
- Soudien, C. & Sayed, Y. (2004). A new racial state? Exclusion and inclusion in education policy and practice in South Africa. *Perspectives in Education*, 22(4), 101-116.
- Spaull, N. (2013). Poverty and privilege: primary school inequality in South Africa. *International Journal of Educational Development*, 33, 436-447.
- Spaull, N. (2015). Accountability and capacity in South African education. *Education as change*, 19(3), 113-142.
- Strand, M., & Lizardo, O. (2017). The hysteresis effect: theorizing mismatch in action. *Journal for the Theory of Social Behaviour*, 47(2), 164-194.
- Taylor, N. and Vinjevold, P. (1999). *Getting Learning Right*. Johannesburg: Joint Education Trust.
- Taylor, N., Muller, J., & Vinjevold, P. (2003). *Getting schools working: Research and systemic school reform in South Africa*. Pearson South Africa.
- Taylor, S. (2011). Uncovering indicators of effective school management in South African using National School Effectiveness Study. *Stellenbosch Economic Working Papers 10/11*, 1-51.
- Taylor, S., Rizvi, F., Lingard, B., & Henry, M. (1997). *Education Policy and the Politics of Change*. London: Routledge.
- Teese, R., & Polesel, J. (2003). Undemocratic schooling: Equity and quality in mass secondary education in Australia: Melbourne Univ. Publishing.
- Thompson, E. P. (1967). Time, work-discipline, and industrial capitalism. *Past & present*, (38), 56-97.
- Thompson, G., & Cook, I. (2017). The politics of teaching time in disciplinary and control societies. *British Journal of Sociology of Education*, 38(1), 26-37.
- Thrupp, M., & Lupton, R. (2006). Taking school contexts more seriously: The social justice challenge. *British journal of educational studies*, 54(3), 308-328.
- Tikly, L., & Mabogoane, T. (1997). Marketisation as a strategy for desegregation and redress: the case of historically white schools in South Africa. *International Review of Education*, 43(2-3), 159-178.
- Timeslive, (2019, March). Motshekga wants special unit to handle school infrastructure. <https://www.timeslive.co.za/news/south-africa/2019-03-03-motshekga-wants-special-unit-to-handle-school-infrastructure/>
- Tom Tom Traffic Index. (2019). Annual traffic statistics for Cape Town 2017/2018. Retrieved from: https://www.tomtom.com/en_gb/traffic-index/cape-town-traffic

- Van der Berg, S., Taylor, S., Gustafsson, M., Spaul, N., & Armstrong, P. (2011). Improving education quality in South Africa. *Report for the National Planning Commission*. Retrieved June, 2, 2016.
- Wahlberg, H. J. (1988). Synthesis of research on time and learning. *Educational Leadership*, 45(6), 76-85.
- Watkins, M. (2017). Can space teach? Theorising pedagogies of social order. *Geographical Research*, 55(1), 80-88.
- Western Cape Education Department (2012). *What is a Dinaledi school?* Retrieved from <http://www.wcedcurriculum.westerncape.gov.za/index.php/dinaledi-articles/352-dinaledi-mst-strategy>
- Western Cape Education Department (2009). *Provisioning of educators—issuing of staff establishments for 2010*. Circular 0031/2009. Reference 20090828-0038
- Western Cape Education Department (2016a). *Dates and timeframes for applications for admission to ordinary Western Cape Education Department (WCED) schools and management of school admission information for 2017/18*. Circular 0040/2016. Reference 20160725-2628.
- Western Cape Education Department (2016b). *Section 21 schools: norms and standards for schools Grades 1-12—financial allocation for the 2017/18 financial year*. Circular 0041/2016. Reference 20160922-4433.
- Western Cape Education Department (2017). *Provision of 2018 teaching staff establishments for ordinary public schools*. Circular 0028/2017. Reference 20170818-4020.
- Western Cape Education Department (2018a). *Compensation for school fee exemptions*. Circular 0005/2018. Reference 20180123-8521.
- Western Cape Education Department (2018b). WCED Annual Report 2017/2018. Accessed from <https://wcedonline.westerncape.gov.za/wced-annual-report>
- Western Cape Education Department (2018c). Interview with the Western Cape Minister for Education, Debbie Schaefer, on Cape Talk. 19 November 2018. Accessed from: <http://www.capetalk.co.za/articles/327719/wc-public-schools-make-their-own-rules-on-feeder-zones-explains-education-mec>
- White, J. (2016). Education, time-poverty and well-being. *Theory and Research in Education*, 14(2), 213-225.
- Witswatersrand (Wits), University of, (2015). *National Minimum Wage in South Africa: the basics. Fact Sheet 1*. Retrieved from: <http://nationalminimumwage.co.za/wp-content/uploads/2015/04/NMW-Fact-Sheet-1.pdf>
- Wood, P. (2019). Rethinking time in the workload debate. *Management in Education*, 33(2), 86-90.

10. Appendices

This study comes with a set of appendices that include explanatory infographics, policy extracts, data collection instruments and explainers that detracted from the flow of the main thesis. A brief summary for each appendix is provided below.

Appendix A: Timetable adherence for both schools. This is the only appendix that provides crucial data for understanding the thesis that is not inline in the document. The reason for its separation as an appendix is the size of the infographic chart was incompatible with an A4 page. For more details on how to interpret the infographic, see Chapter Seven and the adjacent key on each infographic.

Appendix B: Timetable modularity for both schools & Appendix C: Timetable staff elasticity for both schools. After crafting Appendix A, it became apparent than an infographic might also help convey the properties described in Chapter Five of each school's timetable, namely elasticity, granularity and modularity. Appendices B and C show these properties as infographics. For modularity, explainers are provided on the infographics and in Chapter Four. For elasticity, the infographic shows teachers' timetabled week running from left to right. The more green, the more free time (elasticity).

Appendix D: National Senior Certificate Results shows the symbolic capital each school in this study was able to sustain for the years 2010 to 2017. This data was accessed from the Department of Basic Education and from the schools themselves. Key indicators to look for include the percent of students taking maths compared to maths literacy and the pass rates in high-stakes subjects such as maths and physical sciences as these constitute prestigious cultural capital in the current education field.

Appendix E: How timetabling software works (explaining the algorithms of heuristic search problems). This appendix provides an explainer for a reader unfamiliar with software design and/or search problems. A common response to the problem of school timetabling is to use automation. But automation becomes increasingly less viable as timetables become tighter (i.e. have less elasticity). This conundrum—that automation works best for those who need least help—is further explored in this appendix.

Appendix F: Fee exemption calculations provides further detail for Table 6.3: 'Households qualifying for total or partial exemption from school fees'. During the course of this research it became apparent that the rate of fee increases and the rate of income growth since this legislation was passed have not kept pace, and the result is that very high earning families can still apply for school fee exemptions. Appendix F details the percent of South African families (based on a household of four people) who would be able

to apply for partial or total exemption of school fees, across a range of fees that represent a realistic range of fees charged in South African public schools.

Appendix G: Interview questions. Lists of questions used during the study for various interviews. See Chapter Four for more details on interview selection.

Appendix H: Fieldwork observation schedule. As discussed in Chapter Four, this study needed to witness the establishment and maintenance of timetables and rhythms from the beginning of an academic calendar year. It also needed to distribute observation time evenly over two sites, ensuring sufficient time was spent at each, and that all aspects of the day, week and term were covered at both schools. This appendix shows the actual days and times spent at each site.

Appendix I: Data collection instruments provides the reader with the proforma designed to systematically capture timetable lived at each school.

Appendix J: Interviewee information sheets and consent forms—details of the ethics forms used for the study's participants.

Appendices K–P: These appendices provide the original policy texts analysed in Chapter Six. These include:

- **K:** the National Norms and Standards for School Funding, with SASA Chapter Four, fee exemption regulations, and annual NNSSF amendments.
- **L:** relevant extracts from the Personnel Administrative Measures.
- **M:** the Admissions Policy for Ordinary Public Schools.
- **N:** extracts from the National Policy for Promotion and Progression Requirements.
- **O:** the elective options for the FET Phase
- **P:** various provincial circulars that enact the five threads at the provincial level.

Appendix A **School A: timetable adherence over the period of one school week**

[illegible]

School B: timetable adherence over the period of one school week

Day	Week	Time	Period	Code-->	A1	A2	Mr H.	A3	A4	2	3	4	5	6	7	8	9	10/lib	12	13	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	foyer	LMR	Hall	Dance	Music	
Thurs	2	9:30 - 10:30	2	Lesson	.	.	.	.	.	L	L	E	L	L	L	L	L	E	S	E		L	L	E	.	.	.	.	.	.	.	L	.	.	.	.	.	L	L	L		L	E	E	L	?	.	
Thurs	2	10:30 - 11:30	3	Lesson	L	L	L	L	L	L	L	L	L	L	L	L	.	.	.	L	L	L	T	L	E	?	L	L	L		L	L	L	L	L	L	L	L	L	L	E	L	E	L	L	.		
Thurs	2	12:10 - 13:05	4	Lesson	L	S	L	E	L	E	E	L	L	L	L	L	L	T	L	L	L	L	L	E	L	L	L	L	L	L	E	L	L	L	L	L	TS	L	L	L	L	L	E	E	?	E	.	
Thurs	2	13:05 - 14:05	5	Lesson	E	L	L	L	L	L	E	L		L	L	L	L	L	E	L	L	L	L	L	E	L	L	L	T	L	L	E	L	L	L	L	T	L	L	L	L	E	L	L	L	.		
Thurs	2	14:00 - 14:50	6	Lesson	L	E	L	L	E	L	E	L	L	E	E	L	L	E	L	L	L	L	E	E	L	L	L	L	E	L	E	L	L	L	L	L	L	?	?	?	?	?	X	L	?	L	.	
Fri	2	8:30 - 9:30	1	Lesson	E	L	L	L	E	L	L	L	L	L	L	E	L	L	E	L	L	T	L	L	L	T	L	L	L	L	L	L	L	E	L	L	E	L	L	L	L	E	E	L	E	.		
Fri	2	9:30 - 10:30	2	Lesson	.	.	.	.	.	L	L	L	E	L	T	L	L	E	L	L	L	L	L	L	L	L	L	L	E	L	E	L	L	E	L	E	L	L	L	L	E	L	X	.	.	E	.	
Fri	2	11:00 - 12:00	3	Lesson	L	L	L	L	E	L	L	L	L	L	L	S	L	L	L	?	L	L	L	L	T	E	L	L	L	L	T	L	L	T	L	T	L	L	L	E	L	L	E	E	E	E	.	
Fri	2	12:00 - 12:45	4	Lesson	E	E	L	S	S	L	L	L	E	T	L	L	L	E	L	L	L	L	?	L	L	E	L	E	L	L	E	L	L	L	E	L	L	L	L	L	L	X	L	E	E	.		
Tues	1	8:30 - 9:30	1	Lesson	L	E	L	E	E	E	E	L	L	L	L	S	?	E	L	L	L	E	L	L	L	L	L	L	L	E	L	E	L	L	L	S	L	L	L	L	L	L	X	E	L	E	E	
Tues	1	9:30 - 10:30	2	Lesson	L	L	E	L	E	L	L	E	L	L	L	L	L	E	L	L	L	E	E	S	?	L	L	L	E	L	E	L	E	L	E	L	L	L	L	E	L	T	L	L	L	.		
Tues	1	10:30 - 11:30	3	Lesson	L	L	L	L	S	L	L	E	L	L	E	L	L	S	.	.	L	E	L	L	L	L	L	L	E	L	L	L	L	L	L	L	E	L	L	L	L	X	L	.	T	.		
Tues	1	12:10 - 13:05	4	Lesson	?	L	L	L	L	L	L	L	L	L	L	L	L	E	L	L	L	E	L	L	L	L	L	L	E	L	E	L	L	L	E	L	E	L	L	E	L	L	E	E	L	L	.	
Tues	1	13:05 - 14:05	5	Lesson	E	L	L	L	L	L	L	L	L	L	L	L	L	L	L	S	L	T	E	L	L	L	L	L	T	E	L	E	L	L	L	L	E	L	L	L	L	L	.	E	L	.	.	
Tues	1	14:05 - 14:50	6	Lesson	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	L	E	L	L	.	.	.	.	.	.	.	.	.	.	.	.	.	L	L	L	L	L	.	.	.	.	.	
Wed	1	8:30 - 9:40	1	Lesson	E	L	E	E	L	L	L	L	L	E	L	L	L	E	S	E	L	L	L	L	L	L	L	L	L	L	L	E	T	L	L	E	L	L	L	E	L	E	X	S	L	E	.	
Wed	1	9:40 - 10:50	2	Lesson	L	L	E	S	E	L	L	L	L	E	T	L	L	E	L	E	L	L	L	?	L	L	L	L	E	L	L	L	L	L	L	L	L	L	L	L	L	E	E	?	T	.		
Wed	1		assembly																																													
Wed	1	12:10 - 13:15	4	Lesson	L	E	L	E	L	E	L	L	E	L	E	?	E	L	S	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	E	L	L	L	L	L	L	X	L	T	E	.	
Wed	1	13:15 - 14:05	5	Lesson	E	E	L	S	L	L	E	L	L	E	L	T	L	E	S	S	L	L	L	L	L	L	L	E	L	L	L	L	L	L	L	L	E	L	L	L	L	L	L	E	L	L	E	.
Wed	1	14:05 - 14:45	6	Lesson	E	E	L	E	L	L	L	L	E	T	L	L	E	E	L	L	L	L	?	L	L	L	L	L	L	L	L	L	L	L	L	E	L	L	L	L	E	L	X	L	E	T	.	
					Key: L Lesson E Empty room S Students only T Teacher only TS Teacher meeting ? Room not visible . Could not obtain data Different to timetable: reason not clear from data obtained Single class off timetable (by design) Substitution for absent teacher Lesson didn't happen. Students unattended Teacher has been called out of a lesson for admin. Matches timetable Matches timetable: teacher using a room that's not their home room Room swap (not on timetable) Streamed SP A&C with part-time dance staff																																											

School A weekly timetable showing modularity and granularity

	Grade 8						Grade 9						Grade 10				Grade 11				Grade 12			
	8-A	8-B	8-C	8-D	8-E	8-F	9-A	9-B	9-C	9-D	9-E	9-F	10				11				12			
MON-0																								
MON-1	PhySci	History	LO	LO	LifeSci	Geog	Geog	English	English	Art/Drama/Mus			Elective 3				Afrikaans/Xhosa				Maths/Maths literacy			
MON-2	PhySci	History	LO	LO	LifeSci	Geog	Geog	English	English	Art/Drama/Mus			Elective 3				Afrikaans/Xhosa				Maths/Maths literacy			
MON-3	Maths			LifeSci	Geog	Tech	English	3rd lang	Geog	English	English	English	Elective 2				Elective 1				Afrikaans/Xhosa			
MON-4	Maths			LifeSci	Geog	Tech	English	3rd lang	Geog	English	English	English	Elective 2				Elective 1				Afrikaans/Xhosa			
MON-Brk1																								
MON-5	LifeSci	Tech	History	Maths			3rd lang	PhySci	EMS	Geog	3rd lang	3rd lang	Maths/Maths literacy				Elective 3				English			
MON-6	LifeSci	Tech	History	Maths			3rd lang	PhySci	EMS	Geog	3rd lang	3rd lang	Maths/Maths literacy				Elective 3				English			
MON-7	3rd lang	English	English	Art/Drama/Mus			Maths						Afrikaans/Xhosa				Elective 2				Elective 1			
MON-8	3rd lang	English	English	Art/Drama/Mus			Maths						Afrikaans/Xhosa				Elective 2				Elective 1			
MON-Brk2																								
MON-9	Afrikaans/Xhosa						History	EMS	LifeSci	LifeSci	EMS	Geog	Elective 1				English				Elective 2			
MON-10	Geog	LifeSci	Tech	English	3rd lang	3rd lang	Afrikaans/Xhosa						English				Maths/Maths literacy				Elective 3			
MON-11	Geog	LifeSci	Tech	English	3rd lang	3rd lang	Afrikaans/Xhosa						English				Maths/Maths literacy				Elective 3			
TUE-1	Tech	PhySci	LifeSci	Maths			Afrikaans/Xhosa						Elective 2				Elective 1				English			
TUE-2	Tech	PhySci	LifeSci	Maths			Afrikaans/Xhosa						Elective 2				Elective 1				English			
TUE-3	Afrikaans/Xhosa						English	English	English	PhySci	PhySci	EMS	LO				Maths/Maths literacy				Elective 3			
TUE-4	Afrikaans/Xhosa						English	English	English	PhySci	PhySci	EMS	LO				Maths/Maths literacy				Elective 3			
TUE-Brk1																								
TUE-5	Geog	3rd lang	Tech	Geog	English	History	PhySci	History	PhySci	Art/Drama/Mus			Elective 3				LO				Maths/Maths literacy			
TUE-6	Geog	3rd lang	Tech	Geog	English	History	PhySci	History	PhySci	Art/Drama/Mus			Elective 3				LO				Maths/Maths literacy			
TUE-7	English	English	English	PhySci	PhySci	English	Geog	PhySci	3rd lang	3rd lang	English	History	Maths/Maths literacy				Elective 3				LO			
TUE-8	English	English	English	PhySci	PhySci	English	Geog	PhySci	3rd lang	3rd lang	English	History	Maths/Maths literacy				Elective 3				LO			
TUE-Brk2																								
TUE-9	3rd lang	Tech	PhySci	English	Geog	Tech	LifeSci	LifeSci	DB-His	EMS	EMS	Geog	English				Elective 2				Elective 1			
TUE-10	Maths			Tech	History	PhySci	History	EMS	LifeSci	English	Geog	LifeSci	Elective 1				English				Elective 2			
TUE-11	Maths			Tech	History	PhySci	History	EMS	LifeSci	English	Geog	LifeSci	Elective 1				English				Elective 2			
WED-1	Art/Drama/Mus			History	Tech	Geog	Maths						English				Elective 2				Elective 1			
WED-2	Art/Drama/Mus			History	Tech	Geog	Maths						English				Elective 2				Elective 1			
WED-3	LifeSci	English	3rd lang	3rd lang	Tech	English	English	LifeSci	EMS	History	LO	LO	Afrikaans/Xhosa				Maths/Maths literacy				Elective 3			
WED-4	Tech	English	3rd lang	3rd lang	LifeSci	English	LifeSci	Geog	EMS	History	LO	LO	Afrikaans/Xhosa				Maths/Maths literacy				Elective 3			
WED-Brk1																								
WED-5	History	3rd lang	Geog	Geog	English	History	Art/Drama/Mus			Geog	LifeSci	English	Elective 3				Afrikaans/Xhosa				Maths/Maths literacy			
WED-6	History	3rd lang	Geog	Geog	English	History	Art/Drama/Mus			EMS	LifeSci	English	Elective 3				Afrikaans/Xhosa				Maths/Maths literacy			
WED-7	Afrikaans/Xhosa						LO	LO	English	LifeSci	History	Geog	Elective 1				English				Elective 2			
WED-8	Afrikaans/Xhosa						LO	LO	English	LifeSci	History	Geog	Elective 1				English				Elective 2			
WED-Brk2																								
WED-9	3rd lang	PhySci	LifeSci	Tech	Geog	Tech	Afrikaans/Xhosa						Elective 2				Elective 1				English			
WED-10	English	Tech	History	PhySci	LO	LO	EMS	English	3rd lang	3rd lang	English	PhySci	Maths/Maths literacy				Elective 3				Afrikaans/Xhosa			
WED-11	English	Tech	History	English	LO	LO	EMS	English	3rd lang	3rd lang	English	PhySci	Maths/Maths literacy				Elective 3				Afrikaans/Xhosa			
THURS-1	LO	LO	PhySci	Maths			Art/Drama/Mus			History		English	Afrikaans/Xhosa				Elective 2				Elective 1			
THURS-2	LO	LO	LifeSci	Maths			Art/Drama/Mus			History		English	Afrikaans/Xhosa				Elective 2				Elective 1			
THURS-3	Maths			Art/Drama/Mus			English	English	English	English	Geog	EMS	Elective 1				Afrikaans/Xhosa				Elective 2			
THURS-4	Maths			Art/Drama/Mus			English	English	English	English	Geog	EMS	Elective 1				Afrikaans/Xhosa				Elective 2			
THURS-Brk1																								
THURS-5	English						Maths						Elective 2				Elective 1				Afrikaans/Xhosa			
THURS-6	English						Maths						Elective 2				Elective 1				Afrikaans/Xhosa			
THURS-7	Afrikaans/Xhosa						EMS	EMS	PhySci	PhySci	PhySci	History	Maths/Maths literacy				Elective 3				English			
THURS-8	Afrikaans/Xhosa						EMS	EMS	PhySci	PhySci	PhySci	History	Maths/Maths literacy				Elective 3				English			
THURS-Brk2																								
THURS-9	History	History	Tech	PhySci	LifeSci	LifeSci	History	Geog	EMS	LifeSci	EMS	PhySci	English				Maths/Maths literacy				Elective 3			
THURS-10	History	Geog	Geog	Tech	PhySci	LifeSci	PhySci	History	LifeSci	EMS	3rd lang	3rd lang	Elective 3				English				Maths/Maths literacy			
THURS-11	LifeSci	Geog	Geog	Tech	PhySci	Tech	PhySci	History	History	EMS	3rd lang	3rd lang	Elective 3				English				Maths/Maths literacy			
FRI-1	English	LifeSci	English	History	3rd lang	3rd lang	LifeSci	LifeSci	History	EMS	EMS	PhySci	English				Maths/Maths literacy				Elective 3			
FRI-2	English	LifeSci	English	History	3rd lang	3rd lang	LifeSci	LifeSci	History	Geog	EMS	EMS	English				Maths/Maths literacy				Elective 3			
FRI-3	Maths			LifeSci	History	PhySci	Afrikaans/Xhosa						Elective 1				English				Elective 2			
FRI-4	Maths			LifeSci	History	PhySci	Afrikaans/Xhosa						Elective 1				English				Elective 2			
FRI-Brk1																								
FRI-5	PhySci	History	3rd lang	3rd lang	Tech	LifeSci	EMS	Geog	LO	LO	English	English	Maths/Maths literacy				Elective 3				Afrikaans/Xhosa			
FRI-6	PhySci	PhySci	3rd lang	3rd lang	Tech	LifeSci	English	Geog	LO	LO	English	English	Elective 3				Afrikaans/Xhosa				Maths/Maths literacy			
FRI-7	Art/Drama/Mus			English	English	English	Maths						Afrikaans/Xhosa				Elective 2				Elective 1			
FRI-8	Art/Drama/Mus			English	English	English	Maths						Afrikaans/Xhosa				Elective 2				Elective 1			
FRI-Brk2																								
FRI-9	Tech	Geog	PhySci	Maths			3rd lang	3rd lang	Geog	English	LifeSci	LifeSci	Elective 2				Elective 1				English			
FRI-10	Tech	Geog	PhySci	Maths			3rd lang	3rd lang	Geog	English	LifeSci	LifeSci	Elective 2				Elective 1				English			

	Grade 8						Grade 9						Grade 10						Grade 11						Grade 12						
	8-A	8-B	8-C	8-D	8-E	8-F	9-A	9-B	9-C	9-D	9-E	9-F	10-A	10-B	10-C	10-D	10-E	10-F	11-A	11-B	11-C	11-D	11-E	11-F	12-A	12-B	12-C	12-D	12-E	12-F	
MON-1	Afrikaans/Xhosa						NatSci	Tech	Math	EMS	English	NatSci	Elective 2						English	Mit/M	Mit/M	English	English	English	Elective 1						
MON-2	Math	English	History	NatSci	Math	English	Afrikaans/Xhosa						Elective 2						Elective 2						Mit	Mit	Math	English	Math	English	
MON-3	Tech	Tech	LO	History	EMS	EMS	Math	History	Tech	Geog	NatSci	LO	English	Math	Math	Math	English	English	Elective 1						Afrikaans/Xhosa						
MON-Brk1																															
MON-4	EMS	NatSci	English	Tech	LO	Geog	History	Math	English	Tech	Math	Geog	Elective 1						Afrikaans/Xhosa						Elective 2						
MON-5	English	Geog	Math	Math	History	NatSci	EMS	NatSci	EMS	English	LO	English	Math	LO	English	English	LO	Math	LO	English	English	Mit/M	Mit/M	Math	Elective 3						
MON-6	NatSci	Math	NatSci	English	Geog	History	English	English	EMS	Math	EMS	Math	LO	English	Math	LO	English	LO-PE	Elective 3						LO	English	English	Mit	Math	Math	
TUE-1	NatSci	Math	English	English	Math	English	Math	EMS	Math	NatSci	EMS	English	Elective 3						Math	English	LO	LO	LO	LO	Mit	LO-PE	English	English	English	Math	
TUE-2	LO	Tech	Geog	History	English	Math	Art/Drama/Mus				Math	Math	Tech	Elective 1						Afrikaans/Xhosa						LO-PE	Mit	LO	English	Math	Math
TUE-3	Geog	English	NatSci	LO	Tech	Tech	NatSci	Math	Geog	English	Tech	Math	English	Math	LO	English	Math	English	Elective 2						Afrikaans/Xhosa						
TUE-Brk1																															
TUE-4	Afrikaans/Xhosa						EMS	NatSci	NatSci	Art/Drama/Mus			Math	English	English	English	LO	Math	LO	LO	English	Mit/M	Mit/M	Math	Elective 3						
TUE-5	English	LO	Tech	NatSci	EMS	English	Afrikaans/Xhosa						LO	LO	Math	Math	English	LO	LO-PE	Mit/M	Mit/M	English	English	English	Elective 2						
TUE-6	Tech	EMS	EMS	Art/Drama/Mus			English	LO	Math	History	English	NatSci	Afrikaans/Xhosa						Elective 1						English	English	Math	Mit	LO	English	
WED-1	Afrikaans/Xhosa						Art/Drama/Mus				NatSci	NatSci	EMS	Math	English	LO-PE	English	English	Math	LO	Mit/M	Mit/M	Mit/M	Mit/M	English	Elective 3					
WED-2	English	English	Geog	Geog	Math	EMS	Math	History	NatSci	Math	Math	Math	Elective 3						English	LO	English	English	LO-PE	Math	Afrikaans/Xhosa						
WED-Brk1																															
WED-3	History	Math	NatSci	English	English	Math	English	English	English	EMS	Geog	Tech	Elective 2						Elective 2						English	English	English	Mit	Math	Math	
WED-4	Art/Drama/Mus			Math	LO	English	NatSci	Geog	LO	English	History	NatSci	English	Math	English	Math	Math	English	Elective 3						Elective 1						
WED-5	Math	EMS	English	English	LO	Tech	Tech	Math	Math	LO	English	English	Afrikaans/Xhosa						Elective 1						Mit	Mit	Math	English	English	English	
THURS-1	Math	English	EMS	Math	Math	NatSci	LO	LO	LO	Math	English	History	Elective 2						Elective 2						English	English	English	Mit	English	Math	
THURS-2	NatSci	EMS	LO	NatSci	Tech	Math	English	Math	Math	Art/Drama/Mus			Elective 3						Math	English	English	LO-PE	English	Math	Afrikaans/Xhosa						
THURS-3	Afrikaans/Xhosa						Math	Tech	History	NatSci	Math	Geog	Elective 1						English	Mit/M	Mit/M	English	LO	English	Elective 2						
THURS-Brk1																															
THURS-4	History	Geog	English	Art/Drama/Mus			NatSci	English	NatSci	Tech	NatSci	English	Math	English	English	LO-PE	Math	Math	Afrikaans/Xhosa						Elective 3						
THURS-5	Art/Drama/Mus			History	NatSci	Tech	Afrikaans/Xhosa						English	Math	Math	Math	English	English	Elective 1						Mit	Mit	Math	English	LO-PE	LO	
THURS-6	English	Math	Math	English	English	English	LO	NatSci	English	English	LO	Math	Afrikaans/Xhosa						Elective 3						Elective 1						
FRI-1	LO	English	History	NatSci	Math	Geog	Math	EMS	Math	Geog	Math	EMS	Elective 3						Afrikaans/Xhosa						English	English	English	LO	English	Math	
FRI-2	Geog	Math	Math	English	English	LO	LO	English	Tech	Math	NatSci	Math	Afrikaans/Xhosa						Elective 3						Elective 1						
FRI-Brk1																															
FRI-3	Math	NatSci	English	EMS	English	Math	English	Math	English	Tech	English	LO	Elective 1						Math	LO	English	English	English	Math	Elective 2						
FRI-4	English	Tech	Math	Math	NatSci	NatSci	Geog	EMS	EMS	English	Geog	English	Math	LO	Math	English	Math	Math	English	English	LO	Mit/M	Mit/M	English	Afrikaans/Xhosa						
WEEK 2																															
MON-1	Afrikaans/Xhosa						Geog	Tech	History	Math	EMS	NatSci	Elective 3						Math	Mit/M	Mit/M	English	English	LO-PE	LO	LO	LO	LO	English	English	
MON-2	Tech	English	English	LO	History	EMS	English	NatSci	Tech	History	LO	Geog	Math	Math	Math	English	English	Math	Elective 1						English	English	Math	Mit	LO	English	
MON-3	English	History	Math	EMS	English	History	Tech	English	Math	English	Tech	Math	English	English	English	Math	Math	English	Elective 3						Elective 1						
MON-Brk1																															
MON-4	EMS	Math	Tech	Geog	Math	Math	Math	LO	English	NatSci	English	English	Elective 1						Afrikaans/Xhosa						Elective 2						
MON-5	History	NatSci	Geog	Math	NatSci	English	NatSci	Math	LO	Geog	Math	EMS	Afrikaans/Xhosa						English	English	English	Mit/M	Mit/M	Math	Elective 3						
MON-6	Math	LO	LO	English	Geog	NatSci	Afrikaans/Xhosa						Elective 2						Elective 2						Mit	Mit	English	English	Math	Math	
TUE-1	English	English	Math	NatSci	History	History	English	English	EMS	Math	NatSci	Tech	Elective 2						Math	English	LO-PE	LO	English	LO	Mit	LO	Math	Mit	English	English	
TUE-2	Math	Tech	History	Math	EMS	Geog	Tech	Tech	Math	Art/Drama/Mus			English	English	Math	English	English	English	Elective 1						Afrikaans/Xhosa						
TUE-3	EMS	History	NatSci	Tech	Tech	Math	Math	History	LO	Tech	Geog	LO	Elective 1						Afrikaans/Xhosa						Elective 2						
TUE-Brk1																															
TUE-4	Art/Drama/Mus			EMS	English	English	NatSci	NatSci	English	History	Math	Math	Afrikaans/Xhosa						Elective 3						Elective 1						
TUE-5	LO	NatSci	English	English	NatSci	LO	Afrikaans/Xhosa						Math	English	LO	LO	LO-PE	Math	English	Mit/M	Mit/M	Mit/M	Mit/M	English	Elective 3						
TUE-6	Afrikaans/Xhosa						Geog	Math	NatSci	EMS	English	Math	LO-PE	Math	English	Math	Math	LO	Elective 2						English	Mit	English	English	Math	LO	
WED-1	LO	English	NatSci	LO	English	LO	Math	NatSci	English	EMS	Math	EMS	Elective 3						Math	Mit/M	Mit/M	English	English	English	Afrikaans/Xhosa						
WED-2	Math	NatSci	LO	Math	Math	English	Art/Drama/Mus			LO	NatSci	History	Afrikaans/Xhosa						English	English	English	Mit/M	Mit/M	Math	Elective 3						
WED-3	Afrikaans/Xhosa						History	LO	Math	NatSci	Tech	Math	Elective 2						Elective 2						LO	English	English	Mit	Math	Math	
WED-Brk1																															
WED-4	NatSci	EMS	Tech	Art/Drama/Mus			English	English	Geog	LO	History	Tech	Math	Math	Math	LO	LO	Math	Elective 1						Mit	Mit	Math	English	English	English	
WED-5	Tech	LO	EMS	Tech	EMS	EMS	EMS	Math	NatSci	English	English	NatSci	LO	LO-PE	LO	Math	English	English	Afrikaans/Xhosa						Elective 2						
WED-6	English	Math	Math	English	NatSci	Math	Afrikaans/Xhosa						English	English	English	English	Math	LO	Elective 3						Elective 1						
THURS-1	Math	NatSci	EMS	LO	NatSci	English	Art/Drama/Mus			Math	EMS	English	Elective 3						Afrikaans/Xhosa						English	English	English	Mit	English	Math	
THURS-2	English	English	Math	EMS	English	Math	EMS	English	Math	NatSci	Math	English	Elective 2						Math	LO-PE	English	English	English	Math	Afrikaans/Xhosa						
THURS-3	Afrikaans/Xhosa						Tech	EMS	Tech	Art/Drama/Mus			Math	Math	English	English	Math	Math	Elective 1						English	Mit	LO	LO-PE	LO	English	
THURS-Brk1																															
THURS-4	EMS	Math	English	Math	Math	NatSci	English	Math	English	English	English	History	Elective 1						Math	English	LO	LO	LO	English	Elective 2						
THURS-5	NatSci	Geog	NatSci	Art/Drama/Mus			Afrikaans/Xhosa						English	English	Math	Math	English	English	Elective 3						Mit	English	Math	Mit	Math	LO-PE	
THURS-6	Art/Drama/Mus			Geog	Tech	Tech	Math	Geog	History	EMS	History	NatSci	Afrikaans/Xhosa						English	Mit/M	Mit/M	Mit/M	Mit/M	LO	Elective 1						
FRI-1	Geog	English	Tech	Math	English	LO	Afrikaans/Xhosa						English	Math	English	Math	Math	English	Elective 2						English	English	LO-PE	Mit	Math	LO	
FRI-2	Math	LO	English	English	Geog	NatSci	Math	English	English	Math	Tech	LO	Elective 3						Math	Mit/M	Mit/M	English	English	English	Afrikaans/Xhosa						
FRI-Brk1																															
FRI-3	English	History	Math	Tech	Math	Math	History	Geog	NatSci	LO	Math	English	Elective 1						Afrikaans/Xhosa						English	Mit	Math	LO	English	English	
FRI-4	NatSci	Math	English	NatSci	LO	English	LO	Math	Geog	English	LO	Math	Afrikaans/Xhosa						English	English	English	Mit/M	Mit/M	Math	Elective 3						

Appendix C		
School A		

Total teaching period in a week												
Teachers Name	Post level	Total lesson allocation	Lesson count	% lessons allocated	Timetabled subs	Time-tabled meetings (in school)	% periods allocated (incl. lessons, subs + meetings)	Meet ings (after school)	Total unique class groups	Total unique grade-subject combinations	Number of unique subjects	Lesson start time →
	4	17	9	17%	0	6	31%	2	1	1	1	Rooms ↓
	3	27	17	31%	3	3	50%	4	2	2	1	-
	3	34	26	48%	3	4	63%	1	3	3	1	21 [V1]
	3	39	27	50%	3	5	72%	4	3	3	1	G9
	2	33	24	44%	3	5	61%	1	9	3	2	-
	2	40	35	65%	3	1	74%	1	5	3	1	8A [P5]
	2	40	35	65%	3	1	74%	1	5	5	1	Prefab
	2	42	36	67%	3	3	78%	0	5	5	1	23 [R4]
	2	44	36	67%	3	3	81%	2	4	4	2	J4
	2	42	36	67%	3	3	78%	0	5	5	1	29 [Y4]
	1	26	21	39%	3	2	48%	0	5	3	2	16 [Y] (lib)
	1	31	27	50%	3	1	57%	0	6	2	2	8E (G3)
	1	35	28	52%	3	3	65%	1	8	6	2	-
	1	39	34	63%	3	2	72%	0	4	4	1	150 [G1]
	1	39	34	63%	3	2	72%	0	4	4	1	152 [G6]
	1	39	34	63%	3	2	72%	0	4	4	1	151 [G7]
	1	39	34	63%	3	1	72%	1	6	5	2	7 [P4]
	1	40	35	65%	3	2	74%	0	4	4	1	201
	1	36	35	65%	0	1	67%	0	5	5	1	11 [B3]
	1	40	35	65%	3	2	74%	0	4	4	1	J2
	1	40	35	65%	3	2	74%	0			1	J3
	1	42	36	67%	3	2	78%	1	5	3	2	-
	1	41	36	67%	3	1	76%	1	4	2	1	5 [P2]
	1	41	36	67%	3	2	76%	0	5	5	1	6 [P3]
	1	43	37	69%	3	2	80%	1	9	4	2	4 [P1]
	1	45	38	70%	3	4	83%	0	6	6	2	25 [R3]
	1	43	38	70%	3	0	80%	2	5	5	1	J1
	1	44	38	70%	3	3	81%	0	6	6	2	27 [Y2]
	1	44	38	70%	3	3	81%	0	6	6	2	28 [Y3]
	1	44	39	72%	3	2	81%	0	6	5	1	26 [R2]
	1	45	39	72%	3	2	83%	1	6	5	2	3 [O3]
	1	44	39	72%	3	2	81%	0	6	5	1	20 [V2]
	1	44	39	72%	3	2	81%	0	6	5	1	15 [V3]
	1	44	39	72%	3	2	81%	0	6	5	1	19 [Y1]
	1	43	39	72%	2	2	80%	0	5	4	1	31 [Y6]
	1	47	40	74%	3	3	87%	1	8	5	3	32 [R1]
	1	45	40	74%	3	1	83%	1	5	5	1	22 [R5]
	1	47	40	74%	3	3	87%	1	7	5	3	-
	1	46	40	74%	3	1	85%	2	6	5	2	10 [B2]
	1	43	40	74%	3	0	80%	0	4	4	1	8B [P6]
	1	45	41	76%	3	0	83%	1	5	5	1	12 [B4]
	1	48	42	78%	3	2	89%	1	7	7	3	9 [B1]
	1	48	42	78%	3	1	89%	2	6	5	2	13 [B5]
	1	47	42	78%	3	1	87%	1	5	5	2	8F (G2)
	1	46	43	80%	3	0	85%	0	7	5	1	8D (G5)
	1	47	43	80%	3	1	87%	0	7	5	1	1 [O1]
	1	48	43	80%	3	2	89%	0	7	5	1	30 [Y5]
	1	49	44	81%	3	1	91%	1	5	5	2	2 [O2]
	1	48	44	81%	2	2	89%	0	6	5	2	3A [O4]
	1	49	45	83%	3	0	91%	1	5	3	1	8C (G4)
	0	4	4	7%	0	0	7%	0	1	1	1	-
	0	5	5	9%	0	0	9%	0	1	1	1	Media C [Y]
	0	8	8	15%	0	0	15%	0	2	2	1	8F (G2)
	0	23	23	43%	0	0	43%	0	3	3	1	-
M	5	0	0%	3	2		9%	0	0	0	0	224
M	14	8	15%	3	3		26%	0	2	2	1	157
M	13	8	15%	3	2		24%	0	2	2	1	223
M	16	10	19%	3	3		30%	0	3	3	2	160
M	16	11	20%	2	3		30%	0	2	2	2	222
M	41	36	67%	2	3		76%	0	3	2	2	221
	28	27	50%	0	1		52%	0				-
	P1 Mean:		70%									

Monday																
07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00
		F	F	M	M			T	T	M	F		F	F	F	
		F	F	M	M			F	S	F	F		T	T	T	
		T	T	M	M			T	T	F	S		F	T	F	
		T	T	M	M			F	F	T	T		T	F	F	
		T	T	T	T		M	F	F	M	M		F	F	S	
M		F	F	F	F			T	T	T	T		T	T	T	
		T	T	T	T			M	M	T	T		T	F	F	
		T	T	T	T			M	M	T	T		T	T	T	
		T	T	S	F		M	F	F	T	T		T	T	T	
		T	T	T	T			M	M	T	T		T	T	T	
		T	T	T	T			S	F	F	F		F	F	M	
		T	T	S	F		M	F	F	T	T		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
		T	T	T	T			T	T	F	F		T	T	T	
	</															

School B

[illegible]

Appendix D: National Senior Certificate pass rates 2010-2017: School A and School B

	2010		2011		2012		2013		2014		2015		2016		2017	
Subject	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Accounting	100%	71%	100%	85%	100%	92%	100%	70%	100%	67%	100%	59%	100%	55%	100%	57%
Afrikaans First Additional Lang	99%	98%	100%	97%	99%	98%	100%	100%	99%	95%	99%	95%	100%	98%	100%	90%
Arabic Second Additional Lang	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	100%	-
Business Studies	-	53%	-	81%	-	71%	-	95%	-	69%	-	94%	-	71%	-	62%
Computer Aided Technology	-	-	-	-	-	23%	-	57%	-	-	-	-	-	-	-	-
Consumer Studies	-	86%	-	88%	-	65%	-	85%	-	90%	-	90%	-	82%	-	80%
Dance Studies	-	-	100%	-	-	-	100%	-	100%	-	100%	-	100%	-	-	-
Design	100%	-	100%	-	100%	-	-	-	-	-	-	-	-	-	-	-
Dramatic Arts	-	100%	100%	-	-	-	-	90%	100%	75%	100%	100%	100%	-	100%	-
Economics	-	67%	-	68%	-	64%	-	69%	-	85%	-	76%	-	51%	-	73%
English Home Language	100%	85%	100%	89%	100%	89%	100%	96%	100%	92%	100%	95%	100%	96%	100%	94%
French Second Additional Lang	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Geography	100%	64%	100%	62%	100%	52%	100%	58%	100%	67%	100%	84%	100%	62%	100%	65%
German Second Additional Lang	-	-	100%	-	100%	-	-	-	100%	-	-	-	100%	-	100%	-
History	100%	53%	100%	71%	100%	72%	100%	88%	100%	78%	100%	95%	100%	94%	99%	95%
isiXhosa Home Language	-	-	-	-	-	-	-	100%	-	96%	-	100%	-	100%	-	100%
isiXhosa First Additional Lang	100%	96%	100%	100%	100%	99%	100%	96%	100%	99%	100%	98%	100%	97%	100%	98%
isiXhosa Second Additional Lang	100%	-	100%	-	100%	-	100%	-	100%	-	100%	-	100%	-	100%	-
Information Technology	100%	44%	100%	-	100%	100%	100%	56%	100%	50%	100%	35%	86%	33%	100%	11%
Italian Second Additional Lang	100%	-	100%	-	100%	-	-	-	-	-	100%	-	100%	-	100%	-
Life Orientation	100%	100%	100%	98%	100%	100%	100%	99%	100%	93%	100%	96%	100%	100%	100%	99%
Life Science	100%	75%	100%	59%	100%	56%	100%	57%	100%	71%	99%	68%	99%	52%	99%	46%
Maths Literacy	100%	85%	100%	88%	100%	74%	100%	85%	100%	73%	100%	65%	100%	62%	100%	64%
Mathematics	100%	36%	100%	21%	100%	30%	99%	16%	99%	16%	100%	21%	99%	28%	98%	21%
Music	100%	67%	100%	33%	100%	36%	100%	43%	100%	100%	100%	100%	100%	100%	100%	100%
Physical Sciences	100%	27%	100%	37%	97%	56%	98%	28%	97%	38%	98%	31%	98%	27%	99%	33%
Spanish SAL	-	-	-	-	100%	-	-	-	100%	-	-	-	-	-	-	-
Visual Arts	100%	100%	100%	100%	100%	-	100%	-	100%	-	100%	100%	100%	-	100%	-

Appendix E: How timetabling software works.

A common suggested solution to the problem of timetabling in resource constrained schools is to allocate the task to a computer algorithm using timetabling software.

Beyond the assumptions this makes about teachers' relative ICTS literacy¹, handing the task to software is far from a certain strategy for solving the issue. This appendix is a brief explainer on why this is the case.

Search algorithms

Timetabling software is a type of search algorithm. The 'solution space' (apologies to Lefebvre) is the set of all possible combinations of:

teacher – subject – student group – room – time slot

The software uses a sequence of steps to 'search' across this space for a combination that fits predefined criteria. These criteria are specified by the timetabler who sets up the 'problem' i.e. feeds into the software what rules distinguish an acceptable timetable from an unacceptable one, as well as lists for each of the five variables.

Given that there are four variables for each time slot on the timetable and each of these variables can number from ten subjects up to forty student groups, the number of possible combinations is enormous (well into the hundreds of thousands, if not millions). But only a few of these will be acceptable e.g. only certain teachers can teach certain subjects, a room can only be in use by one class at a time, a teacher cannot be in two places at once etc. **The less elasticity in the timetable provisions/inputs, the fewer acceptable combinations.** Like a shuffle puzzle, the fewer gaps between the tiles, the harder it is to arrange the pieces in the correct order.

Search algorithms are portrayed in computer science as a decision tree. Starting with the first 'decision' (Teacher A, or Teacher B?) the software builds a tree, with each branch representing a decision about a variable.

But a tree with hundreds of thousands of nodes will take too long to build and search, if the software examines every possible combination. Most software algorithms use what is called a **heuristic** search approach—instead of searching all the combinations (either 'depth first' by going from the start point right down to a fully formed timetable, realizing it's wrong and then going back to the beginning, or 'breadth first', which involves building the entire tree for every single possible timetable), the timetabling software uses the rules it is given to ignore entire branches of the search tree. For example: if the rule is "All Grade 9s must do maths at the same time

¹ see the PAM extracts in Appendix L, Annexure A.2 paragraph 3.3.3.3 on page 28, which states that timetabling is a core duty of an ordinary P1 level teacher.

on a Wednesday” then as soon as the software reaches a combination where the Grade 9s have maths at different times on a Wednesday, it abandons that branch (and all the ‘sub-branches’ that build on that combination, since they will all necessarily break the rule).

The more rules in place, the more branches are abandoned. Too many constraints, and the software will not be able to find a combination that adheres to all the specified criteria. This is especially the case if the staffing or rooming is tight. Rules will conflict (e.g. “a member of staff can’t be teaching in two places at once” might conflict with “Grade 9s all do maths at the same time”) and when this happens, the human timetabler must decide which rule matters more. This is done by prioritizing the rules in the initial setup—the teacher responsible must tell the algorithm which rules takes priority when a conflict arises.

Thus, ‘nice to have rules’—things like runs for maths or English in the Senior Phase—will necessarily play second fiddle to critical rules such as one room – one teacher – one class at a time. The fewer the viable combinations available, the more these nice to have rules must get broken. This is why exposed schools’ timetables where less elasticity is available must necessarily be more enmeshed and less modular.

But beyond nice-to-haves such as modular timetables, if resourcing is *really* tight, the software will struggle to find a viable solution that adheres to even the necessary rules, since in an enormous solution space of hundreds of thousands of possible combinations, there are very few timetables that meet all criteria. A teacher might set up the software to run the timetable construction, leave it for a day to find a viable timetable, and return to find the output from the software is not acceptable (a core rule was broken to make a combination fit). They must then either rerun the algorithm (and hope for the best) or manually shuffle the output to try and find a combination close to the one provided by the computer which works.

In summary, schools that perhaps need help most with timetabling (exposed schools), since there are fewer possible solutions to their timetable problem, will find using timetabling software a less productive avenue than their fortified counterparts who enjoy greater rooming and staffing elasticity.

In School B for this study, the experienced timetabler tried to use software, but found he had to regularly ‘tweak’ the output manually as the algorithm kept breaking FET elective runs to make things fit (FET elective runs are a critical rule—see Chapter Four). This, in addition to the fact that the timetable kept changing due to staff shifts in the first half of the first term, meant that relying on software was a frustrating and hit-and-miss affair: the software took hours and hours² to spit out its solution which was, in the end, not usable³.

² Large search algorithms are computationally intensive and take a while on the average computer available to normal schools.

³ As a timetabler myself, I found it faster to do a timetable for my school manually using MS Excel than to load all the rules and criteria and priorities into software only to get an unusable solution. In addition to which, manually constructing the timetable meant I was more familiar with its intricacies and hence able to make changes more easily than if the entire artefact was strange and unfamiliar.

Appendix F: Fee exemption thresholds

This table cross references household income with school fees for one child. The percentage in each cell is the percentage of that household's annual income that would be taken up by school fees. More than 10% qualifies for total fee exemption. Between 3 and 10% qualifies for partial exemption. The column on the left indicates what percentage of South Africans are earning at the given level.

So by way of example: a household earning R270 000.00 a year would qualify for full exemption at School A, and partial exemption at School B. 86% of South Africans earn less than this amount.

%# SA households living at this level or below		Income per person per month (assume 4 person household)	Gross household income per year ↓	School fees per annum (fee charging public schools) for one child only																
				R 2 000	R 3 000	R 5 000	R 7 500	R 10 000	R 12 500	R 15 000	R 17 500	R 20 000	R 22 500	R 25 000	R 27 500	R 30 000	R 32 500	R 35 000	R 37 500	R 40 000
child grant status	5%	R 250,00	R 12 000,00	16,7%	25,0%	41,7%	62,5%	83,3%	104,2%	125,0%	145,8%	166,7%	187,5%	208,3%	229,2%	250,0%	270,8%	291,7%	312,5%	333,3%
	21%	R 500,00	R 24 000,00	8,3%	12,5%	20,8%	31,3%	41,7%	52,1%	62,5%	72,9%	83,3%	93,8%	104,2%	114,6%	125,0%	135,4%	145,8%	156,3%	166,7%
	36%	R 750,00	R 36 000,00	5,6%	8,3%	13,9%	20,8%	27,8%	34,7%	41,7%	48,6%	55,6%	62,5%	69,4%	76,4%	83,3%	90,3%	97,2%	104,2%	111,1%
	46%	R 1 000,00	R 48 000,00	4,2%	6,3%	10,4%	15,6%	20,8%	26,0%	31,3%	36,5%	41,7%	46,9%	52,1%	57,3%	62,5%	67,7%	72,9%	78,1%	83,3%
	53%	R 1 250,00	R 60 000,00	3,3%	5,0%	8,3%	12,5%	16,7%	20,8%	25,0%	29,2%	33,3%	37,5%	41,7%	45,8%	50,0%	54,2%	58,3%	62,5%	66,7%
	67%	R 1 875,00	R 90 000,00	2,2%	3,3%	5,6%	8,3%	11,1%	13,9%	16,7%	19,4%	22,2%	25,0%	27,8%	30,6%	33,3%	36,1%	38,9%	41,7%	44,4%
	75%	R 2 500,00	R 120 000,00	1,7%	2,5%	4,2%	6,3%	8,3%	10,4%	12,5%	14,6%	16,7%	18,8%	20,8%	22,9%	25,0%	27,1%	29,2%	31,3%	33,3%
	78%	R 3 125,00	R 150 000,00	1,3%	2,0%	3,3%	5,0%	6,7%	8,3%	10,0%	11,7%	13,3%	15,0%	16,7%	18,3%	20,0%	21,7%	23,3%	25,0%	26,7%
	80%	R 3 750,00	R 180 000,00	1,1%	1,7%	2,8%	4,2%	5,6%	6,9%	8,3%	9,7%	11,1%	12,5%	13,9%	15,3%	16,7%	18,1%	19,4%	20,8%	22,2%
	82%	R 4 375,00	R 210 000,00	1,0%	1,4%	2,4%	3,6%	4,8%	6,0%	7,1%	8,3%	9,5%	10,7%	11,9%	13,1%	14,3%	15,5%	16,7%	17,9%	19,0%
	85%	R 5 000,00	R 240 000,00	0,8%	1,3%	2,1%	3,1%	4,2%	5,2%	6,3%	7,3%	8,3%	9,4%	10,4%	11,5%	12,5%	13,5%	14,6%	15,6%	16,7%
	86%	R 5 625,00	R 270 000,00	0,7%	1,1%	1,9%	2,8%	3,7%	4,6%	5,6%	6,5%	7,4%	8,3%	9,3%	10,2%	11,1%	12,0%	13,0%	13,9%	14,8%
	89%	R 6 250,00	R 300 000,00	0,7%	1,0%	1,7%	2,5%	3,3%	4,2%	5,0%	5,8%	6,7%	7,5%	8,3%	9,2%	10,0%	10,8%	11,7%	12,5%	13,3%
	90%	R 6 875,00	R 330 000,00	0,6%	0,9%	1,5%	2,3%	3,0%	3,8%	4,5%	5,3%	6,1%	6,8%	7,6%	8,3%	9,1%	9,8%	10,6%	11,4%	12,1%
	91%	R 7 500,00	R 360 000,00	0,6%	0,8%	1,4%	2,1%	2,8%	3,5%	4,2%	4,9%	5,6%	6,3%	6,9%	7,6%	8,3%	9,0%	9,7%	10,4%	11,1%
	92%	R 8 125,00	R 390 000,00	0,5%	0,8%	1,3%	1,9%	2,6%	3,2%	3,8%	4,5%	5,1%	5,8%	6,4%	7,1%	7,7%	8,3%	9,0%	9,6%	10,3%
	93%	R 8 750,00	R 420 000,00	0,5%	0,7%	1,2%	1,8%	2,4%	3,0%	3,6%	4,2%	4,8%	5,4%	6,0%	6,5%	7,1%	7,7%	8,3%	8,9%	9,5%
	93%	R 9 375,00	R 450 000,00	0,4%	0,7%	1,1%	1,7%	2,2%	2,8%	3,3%	3,9%	4,4%	5,0%	5,6%	6,1%	6,7%	7,2%	7,8%	8,3%	8,9%
	94%	R 10 000,00	R 480 000,00	0,4%	0,6%	1,0%	1,6%	2,1%	2,6%	3,1%	3,6%	4,2%	4,7%	5,2%	5,7%	6,3%	6,8%	7,3%	7,8%	8,3%
	94%	R 10 625,00	R 510 000,00	0,4%	0,6%	1,0%	1,5%	2,0%	2,5%	2,9%	3,4%	3,9%	4,4%	4,9%	5,4%	5,9%	6,4%	6,9%	7,4%	7,8%
	95%	R 11 250,00	R 540 000,00	0,4%	0,6%	0,9%	1,4%	1,9%	2,3%	2,8%	3,2%	3,7%	4,2%	4,6%	5,1%	5,6%	6,0%	6,5%	6,9%	7,4%
	95%	R 11 875,00	R 570 000,00	0,4%	0,5%	0,9%	1,3%	1,8%	2,2%	2,6%	3,1%	3,5%	3,9%	4,4%	4,8%	5,3%	5,7%	6,1%	6,6%	7,0%
	96%	R 12 500,00	R 600 000,00	0,3%	0,5%	0,8%	1,3%	1,7%	2,1%	2,5%	2,9%	3,3%	3,8%	4,2%	4,6%	5,0%	5,4%	5,8%	6,3%	6,7%
	96%	R 13 125,00	R 630 000,00	0,3%	0,5%	0,8%	1,2%	1,6%	2,0%	2,4%	2,8%	3,2%	3,6%	4,0%	4,4%	4,8%	5,2%	5,6%	6,0%	6,3%
	96%	R 13 750,00	R 660 000,00	0,3%	0,5%	0,8%	1,1%	1,5%	1,9%	2,3%	2,7%	3,0%	3,4%	3,8%	4,2%	4,5%	4,9%	5,3%	5,7%	6,1%
	96%	R 14 375,00	R 690 000,00	0,3%	0,4%	0,7%	1,1%	1,4%	1,8%	2,2%	2,5%	2,9%	3,3%	3,6%	4,0%	4,3%	4,7%	5,1%	5,4%	5,8%
	96%	R 15 000,00	R 720 000,00	0,3%	0,4%	0,7%	1,0%	1,4%	1,7%	2,1%	2,4%	2,8%	3,1%	3,5%	3,8%	4,2%	4,5%	4,9%	5,2%	5,6%
	97%	R 15 625,00	R 750 000,00	0,3%	0,4%	0,7%	1,0%	1,3%	1,7%	2,0%	2,3%	2,7%	3,0%	3,3%	3,7%	4,0%	4,3%	4,7%	5,0%	5,3%
	97%	R 16 250,00	R 780 000,00	0,3%	0,4%	0,6%	1,0%	1,3%	1,6%	1,9%	2,2%	2,6%	2,9%	3,2%	3,5%	3,8%	4,2%	4,5%	4,8%	5,1%
	97%	R 16 875,00	R 810 000,00	0,2%	0,4%	0,6%	0,9%	1,2%	1,5%	1,9%	2,2%	2,5%	2,8%	3,1%	3,4%	3,7%	4,0%	4,3%	4,6%	4,9%
	97%	R 17 500,00	R 840 000,00	0,2%	0,4%	0,6%	0,9%	1,2%	1,5%	1,8%	2,1%	2,4%	2,7%	3,0%	3,3%	3,6%	3,9%	4,2%	4,5%	4,8%
	97%	R 18 125,00	R 870 000,00	0,2%	0,3%	0,6%	0,9%	1,1%	1,4%	1,7%	2,0%	2,3%	2,6%	2,9%	3,2%	3,4%	3,7%	4,0%	4,3%	4,6%
	97%	R 18 750,00	R 900 000,00	0,2%	0,3%	0,6%	0,8%	1,1%	1,4%	1,7%	1,9%	2,2%	2,5%	2,8%	3,1%	3,3%	3,6%	3,9%	4,2%	4,4%
	98%	R 19 375,00	R 930 000,00	0,2%	0,3%	0,5%	0,8%	1,1%	1,3%	1,6%	1,9%	2,2%	2,4%	2,7%	3,0%	3,2%	3,5%	3,8%	4,0%	4,3%
	98%	R 20 000,00	R 960 000,00	0,2%	0,3%	0,5%	0,8%	1,0%	1,3%	1,6%	1,8%	2,1%	2,3%	2,6%	2,9%	3,1%	3,4%	3,6%	3,9%	4,2%
	98%	R 20 625,00	R 990 000,00	0,2%	0,3%	0,5%	0,8%	1,0%	1,3%	1,5%	1,8%	2,0%	2,3%	2,5%	2,8%	3,0%	3,3%	3,5%	3,8%	4,0%
	98%	R 21 250,00	R 1 020 000,00	0,2%	0,3%	0,5%	0,7%	1,0%	1,2%	1,5%	1,7%	2,0%	2,2%	2,5%	2,7%	2,9%	3,2%	3,4%	3,7%	3,9%
	98%	R 21 875,00	R 1 050 000,00	0,2%	0,3%	0,5%	0,7%	1,0%	1,2%	1,4%	1,7%	1,9%	2,1%	2,4%	2,6%	2,9%	3,1%	3,3%	3,6%	3,8%
	98%	R 22 500,00	R 1 080 000,00	0,2%	0,3%	0,5%	0,7%	0,9%	1,2%	1,4%	1,6%	1,9%	2,1%	2,3%	2,5%	2,8%	3,0%	3,2%	3,5%	3,7%
	98%	R 23 125,00	R 1 110 000,00	0,2%	0,3%	0,5%	0,7%	0,9%	1,1%	1,4%	1,6%	1,8%	2,0%	2,3%	2,5%	2,7%	2,9%	3,2%	3,4%	3,6%
	98%	R 23 750,00	R 1 140 000,00	0,2%	0,3%	0,4%	0,7%	0,9%	1,1%	1,3%	1,5%	1,8%	2,0%	2,2%	2,4%	2,6%	2,9%	3,1%	3,3%	3,5%
	99%	R 24 375,00	R 1 170 000,00	0,2%	0,3%	0,4%	0,6%	0,9%	1,1%	1,3%	1,5%	1,7%	1,9%	2,1%	2,4%	2,6%	2,8%	3,0%	3,2%	3,4%
	99%	R 25 000,00	R 1 200 000,00	0,2%	0,3%	0,4%	0,6%	0,8%	1,0%	1,3%	1,5%	1,7%	1,9%	2,1%	2,3%	2,5%	2,7%	2,9%	3,1%	3,3%

Total exemption
Partial exemption
No exemption

Appendix G: Interview Questions

Seven interviewees participated in this study verbally, and one with written responses.

School A:

1. Principal
2. Timetabler
3. Head of Maintenance (also head of discipline)
4. Lead finance officer (written responses)

School B:

1. Principal
2. Timetabler
3. Deputy principal in charge of finance
4. Deputy principal in charge of discipline

Unfortunately the head of the maintenance team at School B could not make an interview.

The order of questions here is not the order of the interview conversation, which flowed organically as topics came up, with the interviewer ticking off questions as they arose.

General principal interview questions

- How long have you served as principal at this school? Were you part of the staff before hand?
- What are the biggest demands on your time as a school leader and principal? What consumes a large part of your day?
- What do you perceive to be the biggest demand on your staff's time? Has this changed at all during your tenure as principal?
- Do you think the mandated school day (as per CAPS) is too long? Too short? What are your thoughts about the volume of content in the curriculum compared to the hours allocated?
- Are your staff pressed for time?
- What difference, do you think, SGB staff make to the school's smooth operation?

Re. the timetable:

- How does the school decide on which subjects to offer at FET level?
- What is the school's stance on Maths vs. Maths Literacy?
- How does the school approach its timetabling? How are class groups decided?
- How are extra murals staffed and scheduled?
- Do staff run extra lessons after school, or before school, or on weekends, for struggling learners?

Moving about the school

- Who allocates rooms? Do staff get to stay in their own room for most of their lessons?
- How many breaks a week are staff expected to perform break duty or fulfil other responsibilities?
- What are the challenges in getting learners to move between lessons without losing time?
- What is the school's policy on lateness? Truancy?
- Do you think that time on task is a critical factor for improving assessment results? i.e. that extra lessons boost marks?

Requests for data:

- How many staff in total? Teaching vs. non-teaching, PED employed vs. school employed
- How many students in total?
- How many applicants for Grade 8 this year? For other grades? Is this typical?

- How does the school manage the selection process for Grade 8? What types of challenges and dilemmas get thrown up?
 - Has the school ever had to challenge an appeal to a placement decision? Or negotiate with the PED about a particular applicant?
 - Do you ever accept late applicants? On what conditions?
- Approximately how many learners repeat in each grade annually? Are some grades more 'sticky' than others? (e.g. grade 9).
- Approximately how many learners leave from each grade annually?
- Where do the learners at the school reside? How do they get to school?
- How many students are exempt from fees? How many are partially exempt and to what degree?
- What percentage of the school budget is sourced from fundraising (not fees) and donations?

Questions that arose during observations:

- How is technology used in the school? Touched on this briefly before but seems like while lessons are not 'hi tech', admin is/comms are/security?
- Oldest learner in the school?
- What is the pay parity between SGB staff and WCED staff in terms of: take home salary? Total cost to company?
- What challenges do you have regarding timeous fee collection?
- How often do you have disciplinary hearings? For what types of reasons? Have you had to expel learners or do they mostly get counselled out?
- What is the biggest threat to the school's security? There are notes about incidents from the past: tell me more about keeping the school safe?
- What % of your day do you spend in meetings? How long is your work day? Do you find that the time allocated in the TT is sufficient? (Refer to the staff meeting I witnessed) Do meetings ever over run?
- What does 'successful' schooling require from students regarding their approach to time?
- **What have you decided to do differently from your predecessors?**
- Illegal and illicit substances are always an issue in schools (came up briefly in the staff meeting). Have there been instances in the past? How frequently? How does the school respond to this?
- How important is maintaining reputation for School A? What would happen if the school experienced a reputational crisis?
- What might happen in the instance of a member of staff who is habitually late/missing class? Even for legitimate reasons? Has this ever happened before?
- Who oversees late-coming?

Any other questions that may arise during the conversation...

Offer opportunity to ask questions back.

Specific questions: School A:

- How many learners are on scholarships?
- When did the school decide to remove the bell?
- School A has a core TT which forms an axis around which other satellite TTs orbit e.g. music, sports. B___ coordinates the Music timetable. Who is overall in charge of sport? How does music get funded?
- C___ monitors lesson time loss and compensates by adjusting accordingly. When did this practice start?
- Does the school experience problems with learners struggling to find time to do homework and/or sleep due to the long extra-mural programmes?
- Please tell me more about the plans to build a new music block? Where? What considerations matter in the decision to do this and in the design of the facility?

- I see your selection criteria outline that access to the school via reliable transport is a consideration. Have you had incidents in the past where learners have struggled to get to school consistently? What happened?
- A teacher said (regarding the collection of info and money for ____) “I’m not following up on non-payers and non-submissions”... how do you protect your teaching staff’s time so that they can focus on teaching and not get bogged down with admin/discipline? To what extent is this within your control?
- To what extent is the school able to extricate itself from WCED interference regarding: curriculum oversight and CAPS adherence; governance decisions and appointments etc.?
- How important is outsourcing of non-teaching and learning activities to students? What might happen if teachers were responsible for all these activities?
- ____ seems to be about fundraising for the school? How? How much gets raised? What are the funds used for?
- One of the interesting facets that has arisen during observations is the qualities of the material spaces of the school. I would like to talk to your head of maintenance about his team and his duties please? Can you give me a sense of how much is spent on maintenance around the school? Also on security? (shuts down/opens up space and movement)

Specific questions: School B:

- Tell me more about the restructuring of the school day. What are your impressions of the change so far, it’s strengths and weaknesses?
- Tell me more about the extra curricular offering of the school? Who is overall in charge of sport? How does music get funded?
- A ____ organises the assessment time table: what challenges have come up regarding getting valid assessments completed?
- What challenges do you experience in getting parental support given your proximity to learners homes?
- How do you protect your teaching staff’s time so that they can focus on teaching and not get bogged down with admin/discipline? To what extent is this within your control?
- To what extent is the school able to extricate itself from WCED interference regarding: curriculum oversight and CAPS adherence; governance decisions and appointments etc.?
- How important is outsourcing of non-teaching and learning activities to students? E.g. the library... What might happen if teachers were responsible for all these activities?
- How typical is the current situation where you are 3 people down before absence due to sickness etc.?
- S ____ is in a position at the moment: has this happened before? Tell me more about the process and what types of issues it introduces.
- One of the interesting facets that has arisen during observations is the challenges of maintaining the physical infrastructure: I would like to talk to your head of maintenance about his team and his duties please? Can you give me a sense of how much is spent on maintenance around the school? Also on security? (shuts down/opens up space and movement). How much is wear and tear and how much is repairing abuse of facilities?

General timetabler interview questions

- How did you end up with the responsibility of being the timetabler?
- How do you do the timetable? Do you use software? Manually?
 - In what format do you receive data about student numbers, subject selections, staff allocations to class-subject combos etc?
- About when do you start preparing the next year's timetable? How long does it take you to complete?
- How often do you need to redo the timetable? What forces a change?
- Subject-selection: how does the school decide what subjects are to be offered and in what combinations?
- What types of issues matter most in establishing a good, smooth timetable?
- What variables/parameters throw chaos into the mix? Teacher specialisms? Shared rooms? Odd student subject selections?
 - Can students select any combination of non-core subjects they like? Or are subject choices presented in streams?
 - Does the school stream or set? In which subjects? What does this do to the timetable?
- How much do you try keep teachers or students in a similar area when setting a timetable's rooming arrangements?
 - Do class sizes affect which rooms can be used by whom?
- How many teachers end up teaching out of specialism to ensure a full timetable load?
- How fraught is timetabling at this school? Does it cause a lot of tension?
- What advice would you give to your successor when you hand this job over?

Specific questions: School A:

- what is 'living timetable'? Can't find them anywhere on the web. Where did you hear about them and how does the system work?

General finance interview questions

Fees

1. What are the annual school fees per child?
2. What percent of total fees are collected?
 - a. This year (2018)?
 - b. On average?
3. How many students are totally exempt from fees?
4. How many students are partially exempt from fees? By what percentage?
5. For exempt learners, does the school attempt to apply for rebate from the WCED?
6. How are annual fee increases decided?

Budget composition

1. What percentage of the school budget is raised through:
 - a. Fund raising activities?
 - b. Donations?
 - c. Infrastructure hire-out?
2. What extra monies are charged to parents over and above fees? i.e. what is not covered by fees?
3. What percentage of the total budget goes towards:
 - a. infrastructure maintenance?
 - b. Capital development costs?
4. Does the school apply for specific ring-fenced funding from WCED? E.g. Safe Schools Initiative, ASIDI funds etc.
 - a. If so, have these applications been successful? When?

Staff

1. Does the school pay SGB posts on pay parity with WCED posts on a pro rata basis? (i.e. same work same pay)
 - a. If not, what is the ratio between the two types of posts (on average)?
2. Does the school pay extra-mural staff (e.g. sports coaches) or are these volunteer positions?

General discipline interview questions

This has come up while I've been observing at the school, so let's start with the big stuff:

- Tell me more about issues of substance abuse?
- Tell me more about drug testing?
 - Have you ever had to use drug kits?
 - Have you ever had incidents of students arriving at school significantly under the influence of substances?
- Late coming:
 - Who tallies/oversees the late-comers records?
 - How is late-coming to classes monitored?
 - Do teachers take register in every class? (how is internal truancy detected?)
- Detentions:
 - Who runs the detentions?
 - How is DT allocation decided?
 - Is there a lot of conflict and tension getting students to detention?
- Why do you think students self-regulate/don't regulate?
- How cooperative/helpful are parents regarding discipline issues?

School A specific question:

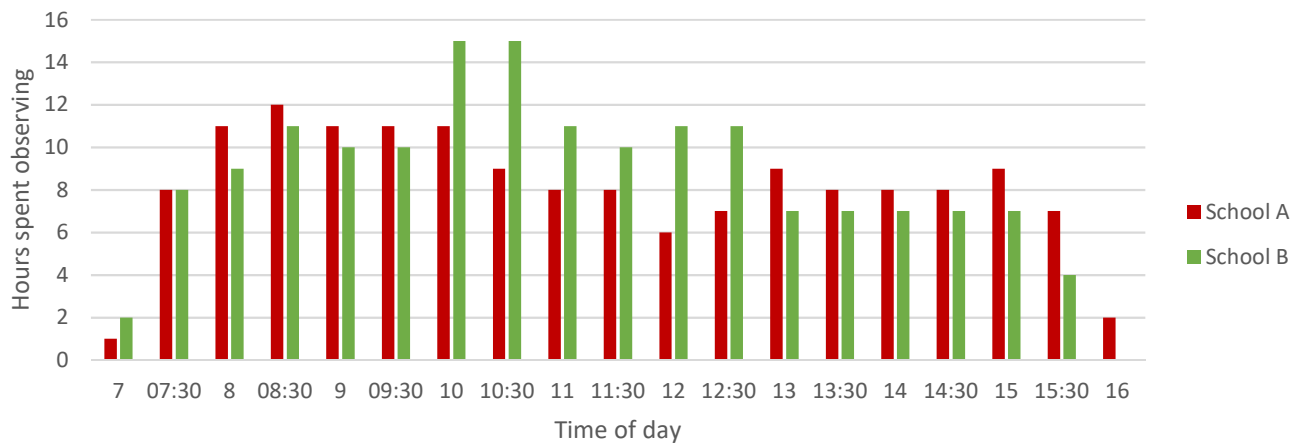
- How much does the demand for places at the school play into students' 'appreciation' of their place here?

General maintenance interview questions

- You've been at the school X years (confirm): when did you take over the maintenance portfolio?
- What does the portfolio entail?
- How many people are on the maintenance team?
- Are these all paid from SGB funds?
- Who designates responsibilities?
- How much of your day does maintenance consume? (School A only)
- What is the non-personnel maintenance budget?
 - Is this reliable year on year?
- What do you see as maintenance priorities?
- What are the biggest maintenance challenges?
 - Outside of budgetary constraints?
- What is rewarding about handling the maintenance of the school?
- What effects do you think infrastructure has on:
 - Flow?
 - Teaching and learning?
 - Safety and security?
 - How people in the school feel?
- What role does aesthetic play in the functioning of the school?
- What—if any—differences do you think there are in maintaining older vs. newer infrastructure?
- What would your advice to your successor be?

	01-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8	
	02-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8	
	03-Mar																				
	04-Mar																				
7	05-Mar	A																1	1	1	1,5
	06-Mar	A																1	1	1	3
	07-Mar	A																			
	08-Mar	B																			2
	09-Mar	B																			
	10-Mar																				
	11-Mar																				
8	12-Mar	B																			2,5
	13-Mar	B																			2,5
	14-Mar	B																			1,5
	15-Mar	A																			
	16-Mar	A																			
	17-Mar																				
	18-Mar																				
9	19-Mar	A																			2,5
	20-Mar	A																			2,5
	21-Mar																				
	22-Mar	B																			2,5
	23-Mar	B																			3
	24-Mar																				
	25-Mar																				
#	26-Mar	A																			2,5
	27-Mar	B																			1
	28-Mar	A																			1,5
	29-Mar	B																			
	30-Mar																				
	31-Mar																				
Term 2																					

Cumulative hours of observation at each school



School: A

Date: _____

Arrival time: _____

Departure time: _____

Weather: _____ Temp _____ General feeling _____

Focus: _____

Codes: L -> lesson happening

EO -> Empty/open

NL -> learners present but no lesson

RC -> register class

EC -> Empty/closed

TO -> no learners, but teacher in classroom

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

Round Start Time: _____

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
31 [Y]		9 [B1]		8C		15		201	
30 [Y]		10 [B2]		8D		20		J1	
29 [Y]		11 [B3]		8E		21		J2	
28 [Y]		12 [B4]		8F		3A [O4]		J3	
27 [Y]		13 [B5]		8B [P]		3 [O3]		J4	
32 [R]		14 [G9]		8A [P]		2 [O2]		Tech room	
26 [R]		Sem A [154]		7 [P]		1 [O1]		Sports Hall	
25 [R]		Sem B [153]		6 [P]		16 [Y]		NT Hall	
23 [R]		152 [G]		5 [P]		Media C [Y]		Jubilee Hall	
22 [R]		151 [G]		4 [P]		19 [Y]		Staff room #	
								Staff lab #	

Music rooms

204		158		160		221		223	
157		159		220		222		224	

School: B Date: _____ Arrival time: _____ Departure time: _____

Arrival time:

Departure time:

Weather: Temp_____ General feeling _____

Focus: _____

NL -> learners present but no lesson

TO -> no learners, but teacher in classroom

Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
40		33		26		19		5	
39		32		25		13		4	
38		31		24		12		3	
37		30		23		9		2	
36		29		22		8		A1	
35		28		21		7		A2	
34		27		20		6		Mr. H	
								A3	
								A4	

Round End Time:

[illegible]

Round End Time:

[illegible]

Round Start Time: _____ Round End Time: _____

Round Start Time: _____ Round End Time: _____

[illegible]

Round Start Time: _____ Round End Time: _____

Round Start Time: _____ Round End Time: _____

Room	Code	Room	Code	Room	Code	Room	Code	Room	Code
40		33		26		19		5	
39		32		25		13		4	
38		31		24		12		3	
37		30		23		9		2	
36		29		22		8		A1	
35		28		21		7		A2	
34		27		20		6		Mr. H	
								A3	
								A4	

Round Start Time: _____ Round End Time: _____

Round Start Time: _____ Round End Time: _____

[illegible]

Appendix J: Consent forms



Request for Consent to Participate in Research

Project Title: **THE TYRANNY OF TIMESPACE: EXAMINING THE TIMETABLE OF SCHOOLING ACTIVITIES AS THE INTERFACE BETWEEN POLICY AND EVERYDAY RHYTHMS.**

Researcher: Ms. Sara Black

Department: School of Education
Graduate Humanities Building
Upper Campus
University of Cape Town

Phone:



Email:



Dear Sir/Madam

I hope this letter finds you well. I am writing to you to request your support to conduct observations and interviews in your school over the coming months.

What is the study about?

The purpose of my research is to try and understand the collective effect of certain education policies on teachers' every day work. In particular, I am trying to understand how resourcing and assessment policies shape schools' material realities and how this in turn affects daily operations for school staff. I would like to do this by examining different schools' timetables, how staff and students move about the school site and how certain policies constrain or enable timetable configurations that are more or less challenging to navigate. The policies I am looking at particularly include:

1. the South African Schools Act and the National Norms and Standards for School Funding, which affects the number of SGB staff available for the timetable;
2. the subject combinations and marks that together constitute a 'pass' at Grade 9 and Grade 12, which affects subject offerings at the school (and hence the timetable and staff required to teach these subjects), and;
3. the Admissions Policy for Ordinary Public Schools which influences which students apply for Grade 8 at which schools.

During the study, I would like to observe staff movements around the school and how teachers and management negotiate the resources available to you to enable learning for your students. In particular, I would like to understand how the policies listed above impact upon your rooming arrangements, staff working in or out of specialism and subject offerings.

Please note that the purpose of the study is ***not to evaluate the school***. Rather, I am attempting to excavate the limitations imposed by policies on your day to day decisions and how these impact upon teaching and learning.

It would be extremely informative to interview you as the leader of the school to gain your perspectives on how you orchestrate the tools and materials available to you to provide learning opportunities to your learners. With your consent, I would like to audio record this interview for my own records in order to refer back to our conversation accurately.

What will I need you to do?

This study will require no deviation from your daily routines. I would like to request an hour or so of your time for an interview, and similarly an hour of time for a few select teachers for an interview outside of school hours. All interviews are at a time of the interviewee's choosing, but beyond this the research focuses on daily routines and movements around the school and how these are shaped by resourcing opportunities and constraints. That is: I mainly request your permission to observe teacher practice at your school over a period of time.

I request your permission to view some school documents during the study to provide further insights, most importantly the school timetable, and any revisions thereof. Any sensitive school documents made available to me by yourself will be kept according to privacy/confidentiality terms of your choosing. If anonymity is preferred, this will be adhered to and respected at all times.

If you are happy to participate in this study and for your school to be a site of research, please complete this form and return it to me. **You are free, at any time, to withdraw your consent** should you feel you no longer wish to participate in the study, and any information about yourself will **not** be used in the research if you do so.

It should also be noted that **there are no costs involved in this study for your part**. I do not believe there are any risks to your person of any nature, and hope that you will find the reflection during the interview process interesting and useful. I will also avail initial insights from my observations to you for comment and feedback, so that if I have misinterpreted anything, you will have opportunity to comment on this.

Please feel free to contact me with any queries or concerns you might have that did not arise during our initial discussion together.

Yours sincerely

Sara Black

Consent form for principals

Please tick the appropriate response for each of the following and then sign at the bottom of this letter.

	Yes	No
General participation		
I agree to participate in this research project.		
I have read this consent form and the information it contains.		
I have had the opportunity to ask any questions about the study.		
Anonymity preferences		
I am happy to be referred to by my real name in the study.		
I would prefer to be anonymized in the study.		
Research activities		
I agree to being interviewed for the study.		
I agree to being observed for the study.		
I consent for my school to be a data collection site for the study for general observations.		
Right to withdraw		
I understand that I and my school are under no obligation to take part in this study.		
I understand that I have the right to withdraw from this study at any stage.		

You will be provided with a signed copy of this consent form and information letter for your records before the study commences.

Name of Participant: _____

Signature of Participant: _____

Date: _____

Name of Researcher: Sara Black

Signature of Researcher: _____

Date: _____

Appendix J: Consent forms



Request for Consent to Participate in Research

Project Title: **THE TYRANNY OF TIMESPACE: EXAMINING THE TIMETABLE OF SCHOOLING ACTIVITIES AS THE INTERFACE BETWEEN POLICY AND EVERYDAY RHYTHMS.**

Researcher: Ms. Sara Black

Department: School of Education
Graduate Humanities Building
Upper Campus
University of Cape Town
Private Bag X5
Rondebosch 7700

Phone:



Email:



Dear Sir/Madam

I hope this letter finds you well. I am writing to you to provide you with some information about a study I would like to conduct in your school over the coming months.

What is the study about?

The purpose of my research is to try and understand the collective effect of certain education policies on teachers' every day work. In particular, I am trying to understand how resourcing and assessment policies shape schools' material realities and how this in turn affects daily operations for school staff.

The policies I am looking at particularly include:

1. the South African Schools Act and the National Norms and Standards for School Funding, which affects who may charge fees and what monies are available to schools who do not charge fees;
2. the subject combinations and marks that together constitute a 'pass' at Grade 9 and Grade 12;
3. the Admissions Policy for Ordinary Public Schools which influences which students apply for Grade 8 at which schools.

During the study, I will observe movement around the school and how resources used to enable teaching and learning. Critical to understanding these resources and to what ends they are deployed is understanding school plant maintenance, financial management and non-teaching-and-learning activities that take up time e.g. learner discipline structures and administrative activities. I will be paying particular attention to the school timetable as the interface between staff and curriculum, rooms and the daily schedule of the school.

To this end, I request to interview you to gain your perspectives on how you orchestrate the tools and materials available to you to attempt to provide learning opportunities to your learners. With your consent, I would like to audio record this interview for my own records and reference in order to refer back to our conversation accurately.

What will I need you to do?

This study will require very little deviation from your daily routines. I would like to request an hour of your time for an interview, but beyond this the research focuses on daily routines and movements around the school and how these are shaped by resourcing opportunities and constraints.

If you are happy to participate in this study, please complete this form and return it to me. **You are free, at any time, to withdraw your consent** should you feel you no longer wish to participate in the study, and any data about your activities will **not** be used in the research if you do so.

It should also be noted that **there are no costs involved in this study for your part**. I do not believe there are any risks to your person of any nature, and hope that you will find the reflection during the interview process interesting and useful. I will also avail initial insights from my observations to you for comment and feedback, so that if I have misinterpreted anything, you will have opportunity to comment on this.

Please feel free to contact me with any queries or concerns you might have that did not arise during our initial discussion together.

Yours sincerely

Sara Black

Consent form for teachers

Please tick the appropriate response for each of the following and then sign at the bottom of this letter.

	Yes	No
General participation		
I agree to participate in this research project.		
I have read this consent form and the information it contains.		
I have had the opportunity to ask any questions about the study.		
Anonymity preferences		
I am happy to be referred to by my real name in the study.		
I would prefer to be anonymized in the study.		
Research activities		
I agree to being interviewed for the study.		
Right to withdraw		
I understand that I am under no obligation to take part in this study.		
I understand that I have the right to withdraw from this study at any stage.		

You will be provided with a signed copy of this consent form and information letter for your records before the study commences.

Name of Participant: _____

Signature of Participant: _____

Date: _____

Name of Researcher: Sara Black

Signature of Researcher: _____

Date: _____

CONTENTS • INHOUD*No.**Page
No. Gazette
 No.***GOVERNMENT NOTICE****Education, Department of***Government Notice*

869	South African Schools Act (84/1996): Amended national norms and standards for school funding	3	29179

GOVERNMENT NOTICE

DEPARTMENT OF EDUCATION

No. 869

31 August 2006

SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 OF 1996)

AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING

I, Grace Naledi Mandisa Pandor, Minister of Education, in terms of Section 39 (7) of the South African Schools Act, 1996 (Act 84 of 1996) hereby publish the Amended National Norms and Standards for School Funding, as set out in the Schedule. The implementation date of the norms will be 1 January 2007.

Copies of the documents are available from the Department of Education:
Private Bag X895
PRETORIA
0001



GNM Pandor, MP
Minister of Education
Date: 27-08-2006
(034S0283)

SCHEDULE

NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING

CONTENTS

ABBREVIATIONS.....	3
PART 1	4
1. INTRODUCTION	5
This document	5
Interpretation	5
Application of the norms	6
When the norms come into effect	6
Monitoring of implementation	6
2. POLICY FRAMEWORK	7
The right to education and the financial responsibility of the state	7
Personnel costs in Provincial Education Departments	8
Targeting expenditure for redress, equity and quality	9
Fee charging and exemption policy in public schools	10
State subsidies to independent schools.....	13
3. IMPLEMENTATION	15
Developing capacity for intensive data use	15
Implementing the norms	17
PART 2	20
4. CAPITAL COST ALLOCATIONS IN PUBLIC SCHOOLS	21
Scenario planning for new school construction	21
Target list.....	22
Hostel facilities.....	23
5. THE SCHOOL ALLOCATION.....	24
Key terms	24
Introduction.....	25
Background	26
Inputs that may be covered by the school allocation	26
The resource targeting list	28
The determination of nationally progressive school allocations	31
The school allocation and accountability.....	34

The list of Section 21 status	36
Resource transfer procedures where SASA Section 21 functions have been allocated.....	37
Resource transfer procedures where SASA Section 21 functions have not been allocated.....	38
Financial controls where Section 21 functions have been allocated	39
Transition and commencement issues	39
Hostel costs.....	40
6. FEE EXEMPTIONS IN PUBLIC SCHOOLS.....	42
Introduction	42
No fee schools	42
Automatic exemptions for individual learners.....	44
Calculations to determine full and partial exemptions	45
Other types of fee exemptions.....	45
7. SUBSIDIES TO INDEPENDENT SCHOOLS	46
Introduction	46
Funding criteria	47
Date of subsidy payments	51
Monitoring and revision	51

FIGURES

Figure 1. Sequencing the application of the norms during the school and state financial years	19
Figure 2. The targets table	31
Figure 3. The poverty table.....	33
Figure 4. Allocation table for independent school subsidies.....	49

ABBREVIATIONS

CEM	Council of Education Ministers
DoE	Department of Education
EMIS	Education Management Information System
HEDCOM	Heads of Education Departments Committee
HOD	Head of a Provincial Education Department or Head of Department
MEC	Member of the Executive Council for Education
MTEF	Medium Term Expenditure Framework
PED	Provincial Education Department
SASA	South African Schools Act, 1996 (as amended)
Section 21	Section 21 of the South African Schools Act, 1996
SGB	School Governing Body

PART 1

1. INTRODUCTION

This document

1. This document sets out the national norms and standards for school funding in terms of the South African Schools Act, 1996 (No. 84 of 1996). It also deals with the procedures to be adopted by Provincial Education Departments (PEDs) in determining resource allocations to their schools. These norms replace any previous school funding norms issued in terms of Section 35 of the South African Schools Act, 1996 (No. 84 of 1996).
2. These norms and standards are based on the original norms and standards published in 1998 (Notice 2362 of 1998). They include amendments introduced in 2003 (Notice 20 of 2003) and amendments made in 2006 following the publication of proposals for public comment (Notice 1357 of 2004).
3. These norms and standards deal with
 - (a) the public funding of public schools, in terms of Section 35 of the Act.
 - (b) the exemption of parents who are unable to pay school fees, in terms of Section 39(4) of the Act.
 - (c) Public subsidies to independent schools in terms of Section 48(1) of the Act.
4. The funding policy relating to learners with special educational needs will be prepared in accordance with Education White Paper 6: Special Needs Education.
5. The Department of Education (DoE) prepared this document after consultation with the Sub-Committee on Finance of the Heads of Education Departments Committee (HEDCOM). The Sub-Committee includes representatives of the DoE and PEDs, the National Treasury and the national educator organisations.

Interpretation

6. In this document-
 - (a) unless the context indicates otherwise, any expression to which a meaning has been assigned in the South African Schools Act, 1996 (No. 84 of 1996), has that meaning;
 - (b) "Regulations" means the Exemption of Parents from the Payment of School Fees Regulations, determined in terms of Section 39 of the Act;
 - (c) "the Act" means the South African Schools Act, 1996 (No. 84 of 1996).

Application of the norms

7. The norms and standards in this document apply uniformly in all provinces, and are intended to prevail in terms of Section 146(2) of the Constitution.

When the norms come into effect

8. These norms become national policy on 1 January 2007.
9. Some norms will apply to the public school financial year (January to December) and others to the state financial year (April to March).
10. Pre-conditions for full and efficient implementation of the norms are described later in this document, with suggestions for a sequence of activities that would enable PEDs to prepare themselves to put the norms into effect.

Monitoring of implementation

11. The Department of Education is responsible for monitoring the implementation of the norms in terms of Section 8 of the National Education Policy Act, 1996 (No. 27 of 1996). The DoE is required to undertake its monitoring and evaluation role

"in a reasonable manner, with a view to enhancing professional capacities in monitoring and evaluation throughout the national education system, and assisting the competent authorities by all practical means within the limits of available public resources to raise the standards of education provision and performance." (Section 8(4))

For purposes of monitoring the DoE will determine reporting formats in consultation with PEDs.

12. Each Head of Department will be expected to verify that the national norms are being complied with in allocating funds, or that acceptable alternatives are being implemented after consultation with the DoE. PEDs must use, for this purpose, systems and software tools that have been made available by the DoE or alternative methods that will produce reports required by the DoE. If the PED is unable to comply with the norms because of a lack of expertise or for any other reason, the DoE must be informed without undue delay, so that the problem can be examined and remedies sought.

2. POLICY FRAMEWORK

The right to education and the financial responsibility of the state

13. The Bill of Rights in the Constitution of the Republic of South Africa, 1996 (No. 108 of 1996) establishes the right to education in these terms:

"Everyone has the right-

- (a) to a basic education, including adult basic education; and
- (b) to further education, which the state, through reasonable measures' must make progressively available and accessible" (Section 29(1)).

14. The South African Schools Act, 1996 came into effect on 1 January 1997. The principal objective of the Act is "to provide for a uniform system for the organisation, governance and funding of schools". In terms of the Act, schools cover learning programmes between grade O (better known as grade R. for "Reception") through to grade 12.

15. The SASA (Section 3) provides for compulsory attendance of learners at school between the ages of seven and 15 (or the completion of grade 9). This is known as the compulsory or General Education phase. Every provincial Member of the Executive Council for Education (MEC) is required to provide sufficient school places for every child in the compulsory attendance bracket. If this cannot be done because of a lack of capacity, the MEC must take steps to remedy the lack as soon as possible.

16. The Act imposes other important responsibilities on the state with respect to the funding of public schools. The basic principles of state funding of public schools derive from the constitutional guarantee of equality and recognition of the right of redress. The Act provides that:

"The State must fund public schools from public revenue on an equitable basis in order to ensure the proper exercise of the rights of learners to education and the redress of past inequalities in educational provision" (Section 34(1)).

17. These principles therefore underlie the national norms and standards for public school funding which the Minister is required to determine (Section 35).

18. The SASA follows the Constitution (Section 29(3)) in establishing the right of any person to establish and maintain an independent school at his or her own cost, and sets out the grounds on which a PED must register an independent school. The Constitution does not preclude state subsidies for independent education institutions. The Act empowers the Minister of Education to determine norms and minimum standards for the granting of subsidies to independent schools. Such subsidies may be granted by the MEC in a province (Sections 46, 48).

Personnel costs in Provincial Education Departments

19. Except in this section, this document does not deal with personnel costs in Provincial Education Departments.

Policy targets

20. The Ministry of Education's personnel policy for schools embodies these key principles:
- (a) schools must be supplied with an adequate number of educator and non-educator personnel
 - (b) such staff members must be equitably distributed according to the pedagogical requirements of the schools, and
 - (c) the cost of personnel establishments must also be sustainable within provincial budgets.
21. As a policy target, based on both local and international evidence, the Ministry of Education has determined that personnel:non-personnel spending in ordinary public schools should be of the order of 80:20.
22. Progress toward meeting the personnel: non-personnel target must be assessed by Provincial Education Departments in the course of preparing each year's updated MTEF. A reduction in the proportion of the education budget spent on personnel must result in an actual increase in budgeted expenditure on pedagogically critical non-personnel items (such as new school construction, provision of essential services, supply of books and other learning support materials, and educator development).
23. Within the total personnel allocation in PEDs, teaching personnel costs should be targeted at 85%, to allow for the appointment and proper distribution of administrative and support staff in Provincial Education Departments.
24. The Department of Education (DoE) will work with Provincial Education Departments, using existing databases, to ensure that they can track the number and location of personnel engaged in teaching and non-teaching activities, in order to assist planning towards this target.

Educator personnel

25. Aside from the above general policy targets, this document does not norm the allocation of educator personnel, either in a province generally, or in teaching posts at or in connection with schools.
26. The Minister of Education determines national policy in respect of educator post provisioning, in terms of the National Education Policy Act, 1996 (No. 27 of 1996). The educator post establishment in each province is determined by the MEC, subject to national norms prescribed for the provisioning of posts (Employment of Educators Act, 1998 (No. 76 of 1998), Section 5(1)).

27. The Minister determines norms in respect of posts to be allocated to public schools, in relation to their curriculum and other circumstances, which the Head of Department must follow in distributing the available posts within the approved education establishment of a PED.
28. The Ministry's personnel and funding policies aim to remove inequities in the distribution of public resources for education, both across provinces and within provinces. The logical direction of policy is that personnel allocation costs to schools should be funded, eventually, on the basis of an equitable cost per learner, in order to address more efficiently the aim of redress and equity in the provision of quality education. However, these norms and the funding practices of PEDs are not yet based on a strict equitable cost per learner.

Non-teaching personnel at school level

29. The allocation of non-teaching staff to schools, including administrative and support staff, is extremely uneven. The provision of such personnel has been severely lacking in historically disadvantaged and small schools. Inequalities in the provision of such staff members is almost certainly associated with major inefficiencies in schools which serve poor communities.
30. The Minister of Education is responsible for determining norms for the provision of non-educator personnel, including non-teaching personnel at school level.

Targeting expenditure for redress, equity and quality

31. Effecting redress and equity in school funding, with a view to progressively improving the quality of school education, within a framework of greater efficiency in organising and providing education services, are matters of urgent priority for the Ministry of Education. The Preamble to the South African Schools Act, 1996 states that:

"...this country requires a new national system for schools which will redress past injustices in educational provision, provide an education of progressively high quality for all learners and in so doing lay a strong foundation for the development of all our people's talents and capabilities...."

32. To achieve these objectives in a systematic manner requires new systems of budgeting and spending for schools.
33. In terms of our Constitution and the government's budgeting procedure, the Ministry of Education does not decide on the amounts to be allocated annually for Provincial Education Departments. This is the responsibility of provincial governments and legislatures, which must make appropriations to their education departments from the total revenue resources available to their provinces. Thus, each province determines its own level of spending on education, in relation to its overall assessment of needs and resources.

34. It follows that national norms for funding schools cannot prescribe actual minimum amounts in Rands to be spent per learner, however desirable that might be.
35. From the 1998/99 financial year, the national and provincial budgets have been prepared within the MTEF, which enables government outlays to be planned on a three-year rolling basis.
36. An important assumption underlying these national norms is that the national and provincial levels of government will honour the state's duty, in terms of the Constitution and the SASA, to progressively provide resources to safeguard the right to education of all South Africans. However, educational needs are always greater than the budgetary provision for education. To effect redress and improve equity, therefore, public spending on schools must be specifically targeted to the needs of the poorest. This will apply to both the General Education (grades 1-9) and the Further Education and Training (grades 10-12) phases.

Fee charging and exemption policy in public schools

School fees and equity

37. The SASA imposes a responsibility on all public school governing bodies to do their utmost to improve the quality of education in their schools by raising additional resources to supplement those which the state provides from public funds (Section 36). All parents, but particularly those who are less poor or who have good incomes, are thereby encouraged to increase their own direct financial and other contributions to the quality of their children's education in public schools. The Act does not interfere unreasonably with parents' discretion under the law as to how to spend their own resources on their children's education.
38. Ironically, given the emphasis on redress and equity, the funding provisions of the Act appear to have worked thus far to the advantage of public schools patronised by middle-class and wealthy parents. The apartheid regime favoured such communities with high-quality facilities, equipment and resources. Vigorous fund-raising by parent bodies, including commercial sponsorships and fee income, have enabled many such schools to add to their facilities, equipment and learning resources, and expand their range of cultural and sporting activities. Since 1995, when such schools have been required to down-size their staff establishments, many have been able to recruit additional staff on governing body contracts, paid from the school fund.
39. Poor people, on the other hand, especially in former homeland areas, have contributed a disproportionate share of their incomes over many decades to the building, upkeep and improvement of schools, through school funds and other contributions, including physical labour. All too many schools in poor rural and urban working-class communities still suffer the legacy of large classes, deplorable physical conditions, and absence of learning resources, despite various school building

programmes. Yet the educators and learners in poor schools are expected to achieve the same levels of learning and teaching as their compatriots.

40. Such contradictions within the same public school system reflect past discriminatory investment in schooling, and vast current disparities in the personal income of parents. The present document addresses these inequalities by establishing a sharply progressive state funding policy for ordinary public schools, which favours poor communities.

Parents' responsibility

41. All public school governing bodies are obliged by the Act to support their schools financially as best they can. The Act provides that a governing body must -

"take all reasonable measures within its means to supplement the resources provided by the State in order to improve the quality of education provided by the school to all learners at the school" (Section 36).

42. However, in fulfilling their obligation to raise supplementary resources, governing bodies are not required to charge school fees. Whether or not to charge school fees is a matter for the parents of the schools, where schools have not been declared no fee schools in terms of these norms and Section 39(7) of the Act¹. The Act links the question of fees to the budget of the school, which the governing body must present to a general meeting of parents for approval. The intention is that the governing body will give the parents all necessary information about the school's income, from the state and other sources, and its educational needs. Parents will then decide what additional revenue the school needs for educational purposes, and how that revenue is to be raised, including whether or not fees are to be charged.
43. At the parents' general meeting, any resolution that proposes fee payment must include the amount of fees to be charged, and "equitable criteria and procedures for the total, partial or conditional exemption of parents who are unable to pay" the fees (Section 39(2)). In making its decisions, therefore, the parent body must take into account, as far as is practicable, the financial circumstances of all the parents, taken as a whole. The Ministry expects that more affluent, or less poor, parent communities will contribute proportionally more, because state funding per learner in their schools will be less than in schools serving poorer communities. In no fee schools, parents may not set compulsory school

¹ Section 1(xiv) of the Act defines "parent" as-

- (a) the parent or guardian of a learner;
- (b) the person legally entitled to custody of a learner; or
- (c) the person who undertakes to fulfil the obligations of a person referred to in paragraphs (a) or (b) towards the learner's education at school.

fees, and the school may not levy such fees. This is to protect households in the socio-economically least advantaged sections of society.

44. A parent body, taking into account its circumstances, may decide to charge no fees at all, even if parents have the right to determine compulsory school fees. In such a case the question of exemptions does not arise. Another parent body may decide to set a small fee, so that no parent needs to be exempted. In most public schools where parents decide to charge fees, parents' ability to pay fees may vary considerably. In such cases, difficult decisions must be taken about the level of fees, and an equitable threshold for exemption from fee-paying.
45. Parents of learners at a public school, therefore, carry serious responsibilities with respect to the determination of a school's budget, its sources of revenue, and (if fees are charged) the level of fees and the conditions for exemption of parents from fee paying. Furthermore, if a majority of parents vote in favour of school fees, each parent is responsible for paying the required fee, unless an exemption has been granted, and unless the school has been declared a no fee school. But no learner can be denied admission, or otherwise discriminated against, on grounds of the parent's inability or failure to pay fees.
46. The Ministry of Education monitors all aspects of the implementation of the South African Schools Act, 1996, in order to assess to what extent its objectives are being met. In particular, the effect of the new budget allocation policy on the current inequalities in school provision, the levels of fee charging by public schools, and the uses to which such income is put, are all important matters of legitimate concern to the Ministry and the public, which must be kept under review.

State subsidies to independent schools

The independent school sector

47. Independent schools vary substantially in age, size, location, socio-economic status, facilities, staff, mission, governance, representivity, religious or secular identity, community service, cost structure, endowments, financial viability, rates of fees, and quality of teaching and learning. It is impossible to generalise about them. Many deliver valuable educational services and have loyal clienteles. Others deliver services of low quality and exploit the ignorance of parents. Some pride themselves on conservative principles of governance and teaching. Others value innovation. Some have an inward focus. Others have a deliberate mission of social concern and professional co-operation with public schools serving the poor.
48. Independent school enrolment amounts to about two percent of total school enrolment nation-wide. This percentage may be increasing. Within provinces, independent school enrolments vary from a fraction of a percent of total school enrolment, to several times the national average. If all learners were to transfer to public schools, the cost of public education in certain provinces might increase by as much as five percent.

49. The practice of granting state subsidies to registered independent schools (previously known as private schools) is well established in South Africa. Subsidies have typically been calculated as a defined fraction of the cost per learner in the public school system. Before 1994, independent schools were required to register with the respective education departments of the apartheid state, among which the cost per learner was grossly unequal. Therefore, state subsidies to independent schools reflected the pattern of race-based inequality in the public (state and state-aided) school systems under apartheid.
50. Race-based inequalities in subsidies to independent schools have been eliminated since 1994. Since then, subsidy levels have differed somewhat by province. But extreme pressure on the non-salary components of provincial education budgets, especially in 1997/98 and 1998/99, has resulted in a sharp decline in the per learner value of independent school subsidies, and considerable uncertainty as to the future trend of independent school funding by provincial education authorities.
51. Fees in independent schools have tended to rise in response to subsidy cuts. Some independent school proprietors have applied for schools to be taken over by Provincial Education Departments, as public schools on private property, in terms of Section 14 of the Act. PEDs have been slow to comply.
52. The Government is grappling with the necessity to stabilise and reprioritise provincial education budgets, in terms of the Medium Term Expenditure Framework. The serious reality underlying the new policy for school funding is that, for the foreseeable future, provincial education budgets will be extremely constrained, especially with respect to non-personnel allocations, out of which subsidies are paid.

Subsidy policy

53. The Ministry of Education cannot determine subsidy levels in monetary (Rand) terms because, under our Constitution, budget decisions of that kind are made within provincial governments. For this reason, the national norms for independent school subsidies are expressed as criteria of eligibility for subsidy, and principles of allocation. These criteria and principles are consistent with the values underlying the Constitution and the Act.
54. The Ministry of Education bases its subsidy policy on the fiscal argument, and on social grounds. The fiscal argument is as follows. The state has a constitutional and statutory responsibility to provide school education to all learners. However, the right of reputable, registered independent schools to exist is protected by the Constitution, and the payment of subsidies to them is not precluded. Such independent schools perform a service to their learners that would otherwise have to be performed by the Provincial Education Departments. Public subsidies to such schools cost the state considerably less per learner than if the same learners

enrolled in public schools. It is, therefore, cost efficient for the state to provide a subsidy.

55. In South Africa, the fiscal argument is an important but not a sufficient basis for national policy. Given the extreme inequalities and backlogs in the provision of public education and the pressure on public education budget allocations, the national policy on public subsidies to independent schools must serve explicit social purposes.
56. Subsidy allocations, therefore, must show preference for independent schools that are well managed, provide good education, serve poor communities and individuals, and are not operated for profit. Such criteria must be capable of measurement according to objective, transparent, and verifiable criteria.

3. IMPLEMENTATION

Developing capacity for intensive data use

Data needs

57. Most PEDs manage budgets of many billions of Rands. Targeting redress, and improving equity in public funding of public schools in an efficient manner, requires the DoE and PEDs to undertake serious budgetary and financial analysis, and to use information intensively.
58. In order to make progress towards equity in school funding, each Provincial Education Department must
 - (a) use relevant provincial data much more intensively in budgeting and planning decisions;
 - (b) develop the necessary data systems to guide planning and allocations; and
 - (c) be able to demonstrate to the DoE that progress is being made.
59. The SASA provides that all public schools are budget and cost centres (Sections 37, 38 and 42). These norms and standards therefore require the use of certain data that have not previously been necessary in budgeting for public schools.
60. Schools must provide information to Provincial Education Departments (Section 59 of the Act). On their part, departments must ensure that information is received on time from schools, so that the necessary analysis can be undertaken, and resource allocation decisions made on time.
61. PEDs must annually provide public schools with sufficient information so that the schools' governing bodies can develop their budgets as required by Section 34 of the Act.
62. PEDs must annually provide independent schools by 30 September of each year with sufficient indicative information, at least the separate provincial average estimate per learner in the primary and secondary phases of ordinary public schools, and an indication of the subsidy category under which the school is grouped in Figure 4 of paragraph 187, to enable them to plan their budgets and fee schedules for the following year. It should be noted that this subsidy amount is merely for planning purposes and might differ from the actual subsidy amount allocated.
63. Initially, the budget information provided to schools by PEDs may be indicative, rather than fully detailed. In time, such information should include the current year's expenditures at each school, and the guideline amount of the total allocation by the Provincial Education Department to the school for the coming school year, including all guideline personnel costs. Such costs should be expressed both in absolute and per learner terms. This is necessary so that schools become accustomed to thinking

about their total costs per learner. The aim is to improve each PED's accounting and information processing systems so that each school's costs for personnel and non-personnel can be identified by item.

64. Comprehensive data on schools have been created through the national School Register of Needs survey, whose databases have been incorporated in provincial data systems, and the new, provincially-based national Education Management Information System (EMIS). The 1996 national Census reports will provide reliable and up-to-date demographic information. Provincial Education Departments may have access to other data sources, and the national Department will augment these wherever possible.
65. The MTEF provides a co-operative mechanism for improving the accuracy of budget-related data, and undertaking relevant analytic studies. The DoE and PEDs are active participants in these processes.

Skill requirements

66. To attempt to accomplish the new tasks without high-level skills is absolutely unrealistic, especially given the size of provincial education budgets. Each Provincial Education Department must, therefore, acquire the services of:
 - (a) At least one, and preferably several, highly-skilled strategic financial analysts who understand the use of data-intensive planning and analysis techniques in public financial management. If not already deeply familiar with education issues and policies, they must be willing to make a careful study and acquire the necessary knowledge.
 - (b) Several high-level accounting experts who understand the national computerised public financial and management information systems. Both accounting expertise and strategic financial management expertise are necessary if PEDs are to apply the norms satisfactorily.
 - (c) Several highly-skilled information systems experts to improve the functioning of the education databases (including the EMIS). This will include the decentralisation or devolution of such functions and the training of regional and district officers.
 - (d) At least one senior statistician or applied numerical analyst.
 - (e) At least one person skilled in educational planning and forecasting techniques.
 - (f) Computer systems and databases.
67. Provinces that have difficulty making the necessary appointments should explore:
 - (a) the use of existing donor-funded arrangements with consulting firms and NGOs;

- (b) secondments from other public sector organisations (e.g., financial or scientific);
 - (c) secondments from the private sector;
 - (d) consultancies or other contracted services; and
 - (e) the use of DoE personnel with financial and EMIS expertise, to assist with the induction of the new, high-level analysts.
68. Each Provincial Education Department should plan the work of such specialists as follows:
- (a) Assess the tasks that must be accomplished, taking into account financial regulations, sound financial management procedures, and the National funding norms described in this document
 - (b) Proceed to appoint, or cause to be seconded, or out-source with own or donor funds, persons with the skills listed above to undertake the tasks identified in step (a).
 - (c) Clarify the relationship of the new specialists to existing work units. Lines of accountability and working relationships must be very clear.
 - (d) Ensure that the new specialists have the necessary operating budget, status, and support personnel, such as data entry personnel, to get the work done.
 - (e) Ensure that they interact with colleagues in similar posts in other provinces and with DoE officials working on these tasks, as a means of assisting with their familiarisation with the policy environment.
 - (f) Ensure that they have a written Scope of Work or task description. Draft lists of technical tasks consistent with the funding norms and other ongoing financial management tasks are available from the DoE.
 - (g) The Scope of Work must include budgeted plans for financial capacity building in provincial, district and other offices of the PED (depending on their actual responsibilities), school management teams and SGBs.
69. A Provincial Education Department that is not technically ready to apply the norms in full, will be expected to present to the DoE a detailed management plan for the acquisition of the necessary capacity to implement. This plan must be consistent with paragraphs 58-60 of this document. The DoE will assist PEDs to develop the capacity they need.

Implementing the norms

70. Certain tasks have priority, and must be undertaken or continued even before the norms and standards come into effect. These are:
- (a) creating a computerised method of tracking and documenting the targeted allocations and subsidies, according to the norms;

- (b) creating appropriate accounting and financial mechanisms to allocate and track funds in terms of the norms, and to inform schools of their allocations as required by Section 34 of the Act;
 - (c) helping SGBs, in schools that have not been declared no fee schools in terms of SASA Section 39(7), to understand how to advise parents on whether to set fees, to calculate the level of fees, to determine exemption criteria and procedures, and to handle appeals (SASA, Sections 38-40).
71. Analytical and budgetary preparation for January of year n+1 must start not later than the beginning of the school year of year n. Figure 1 outlines key aspects or functions of the norms that pertain to the school and fiscal years, or that are ongoing. The entries are presented in approximate chronological order during the year, except for the "ongoing" column. There is no time-wise correspondence across the three lists. Details and explanations of the activities listed in Figure 1 may be found in Part 2 of this document.

Figure 1. Sequencing the application of the norms during the school and state financial years

School Financial Year	State Financial Year	Ongoing
1. Determination of Rand value of subsidies to independent schools (term by term) for current school year.	1. Availability of guideline, preliminary, and final budgetary information which can be used to determine school-level budgets and inform schools.	1. Ensure that personnel, teams, and systems needed to accomplish the tasks in this table and in these norms are available.
2. Determination of which public schools will be able to receive direct transfer payments for certain items for next school year and of which public schools will be no fee schools.	2. Availability of budgeted funds.	2. Improve databases for targeting of public schools according to poverty and school conditions criteria
3. Targeting of public schools according to targeting criteria for next school year and development of master targeting list.		3. Improve criteria for determining which public schools receive direct transfer payments for certain items.
4. Provide guideline budget information to public schools on their level of financial support for next year, including personnel, other directly-provided items, and transfer payments.		4. Improve financial and physical planning for new construction requirements, including analysis for targeting priorities.
5. Determination of percentage subsidy levels for independent schools for next school year.		5. Improve accounting, financial, and EMIS tracking methods ensure that individual school costs and personnel allocations can be tracked, cross-indexed and made more accurate.
6. Fee determination and exemptions at public schools for next school year. (The PED is not necessarily directly involved in these processes, but bears a responsibility of supervision and ensuring that governing bodies are well prepared.)		6. Provide financial management training to governing bodies and school leadership
		7. Ensure audited status of public schools.
		8. Ensure well-functioning process of appeal from parents over school fee exemptions.

PART 2

4. CAPITAL COST ALLOCATIONS IN PUBLIC SCHOOLS

Scenario planning for new school construction

72. "New classroom and other construction allocations" includes provision for water, electricity, sewage and telephone services on site, and connections to mains services where these are provided to the school site.
73. Provincial Education Departments must budget for this category in terms of their overall budget for education and for schools, and the relative flexibility or rigidity of other budget items.
74. The MEC for Education of each province must ensure that there are enough school places to enable each child living in the province to attend school during the compulsory phase (Section 3(3) of the Act). If an MEC cannot comply with this mandate, he or she must take steps to remedy the situation and must report annually to the Minister of Education on progress made (Section 3(4) of the Act).
75. Despite the current shortage of funds for capital development, as an aid to planning and decision-making, each PED must:
 - (a) maintain an accurate, prioritised, annually updated database of school construction needs, and
 - (b) undertake annually updated long-term projections of new school construction targets and funding requirements, based on these norms.
76. Part of the physical planning framework should include an analysis of the cost and educational need for schools that are smaller than is normally desirable. If they are very close to each other, and there are no economic or educational grounds for their separate existence, the options of merger or closure (in terms of Section 33 of the Act) should be considered. In the event of a merger or closure, the Provincial Education Department must ensure that all affected learners have access, on a reasonable basis, to alternative public school accommodation.
77. The scenario planning should initially estimate the requirements to eliminate backlogs and provide sufficient school places by the target year 2008. This must form part of the analytical work required for the MTEF, and should be adjusted annually in the light of new data and performance in new school construction. Depending on the availability of funds each year, and construction performance, the plan may require acceleration or deceleration.

Target list

78. The construction of new schools or additional classrooms and learning facilities should be targeted to the neediest population. In this expenditure category, "need" is defined in terms of
- (a) lack of current schools, or
 - (b) overcrowding of existing ones.
79. No national norm for "crowding" is given in this document. Each PED must objectively determine where to site new schools and classrooms based on provincial norms and verifiable crowding and distance indicators (need indicators) developed from available data, including the School Register of Needs, Census data, and the department's own EMIS. Wherever possible, PEDs must aim to eliminate under-utilisation of physical space occurring concurrently with overcrowding, and must therefore also determine minimum per classroom occupation levels below which schools will be considered under-utilised.
80. Need indicators should refer to the proportion of children who are out of school or are in over-crowded schools. Preference should be given to areas where –
- (a) children are out of school and there is no uncrowded local or nearby school; or
 - (b) all eligible children are enrolled in school but the local or nearby schools are crowded; *and*
 - (c) an analysis of population movements demonstrates that the population concerned is resident and permanent.
81. Using these criteria, the PEDs must develop a ranking of geographical areas from neediest to least needy, based on the numbers of children out of school or in existing crowded schools. Backlogs must be eliminated by starting with the neediest, most crowded areas, and proceeding as quickly as possible down the list of priorities.
82. In the allocation of new school construction funds, preference must be given to-
- (a) facilities serving the compulsory education grades (grades 1-9) in order to ensure that all eligible learners have school places as soon as possible, and
 - (b) extensions to existing schools, rather than new schools, except where extensions would result in schools that are too large to be pedagogically sound, or would otherwise be uneconomical, impractical, or undesirable on educational grounds.

Hostel facilities

83. New hostel facilities may be built if the following criteria are satisfied:

- (a) the crowding criteria in paragraphs 78 to 82, for construction of new schools or extensions; and
- (b) the transport time and poverty criteria in paragraph 148.

84. Other criteria may be used, provided that they give the same results in terms of equity and efficiency. Provincial Education Departments may be required to verify such results, in order to demonstrate that they have complied with this national norm for hostel construction.

5. THE SCHOOL ALLOCATION

85. This section describes the rights and obligations of schools and the state with regard to the school allocation that is granted by Government on an annual basis to public ordinary schools. This section also describes the hostel subsidy.

86. This section relates to public ordinary schools only. 'School' in this section must be taken to mean 'public ordinary school'.

Key terms

87. The following terms have particular importance with regard to the school allocation.

National poverty distribution table (or the 'poverty table').

A table, provided in this policy, that describes the distribution of national poverty across the country.

National quintile for public schools. One of five groups into which all South African public ordinary schools are placed, and where the grouping is according to the poverty of the community around the school. Quintile one is the most poor quintile, quintile two is the second-poorest quintile, and so on. Each national quintile encompasses one-fifth of the learners enrolled in public ordinary schools. In this policy, 'national quintile' means 'national quintile for public schools'.

National quintile for learners. One of the five groups into which all South African public ordinary school learners are placed. The national quintile for any learner is always the same as the national quintile for the public school in which the learner is enrolled.

National table of targets for the school allocation (or the 'targets table'). A table, provided in this policy, that lays down the per learner monetary targets for the school allocation in terms of national poverty quintiles.

Resource targeting list. A list of schools in a province with schools ranked according to poverty of the school community. Schools should be sorted from poorest to least poor on this list.

School allocation. An amount allocated by the state to each public ordinary school in the country on an annual basis in order to finance non-personnel non capital expenditure items.

School allocation budget. A provincial budget used exclusively to finance the school allocations in the province.

School poverty score. A score attached to each school that reflects the degree of poverty of the surrounding community.

Introduction

88. The school allocation is intended to finance key inputs other than personnel and buildings in the education process. Key examples of inputs for which the school allocation is intended are textbooks, stationery and non-educational items such as cleaning materials and electricity. Such inputs are necessary if educators and other personnel in schools are to perform their functions properly. The school allocation is therefore an important instrument supporting Government's commitment to fulfilling the state's Constitutional obligation to provide education.
89. As there is a history within South Africa and in other countries of school fees being used to cover the items targeted by the school allocation, Government regards a school allocation that is adequate for at least the poor, as a key lever for ensuring that households suffering the effects of poverty enjoy schooling that is adequately funded by the state. A distributional approach that favours the poor in this regard is in keeping not only with Government's Constitutional obligation to redress the imbalances of the past, but also with South Africa's commitment to various regional and international agreements to combat poverty through increased access to quality education.
90. Government sees the school allocation as a key means of empowering school communities, and realising democracy at the level of the school. It is important for the local level to participate in decision-making relating to what non-personnel inputs to purchase for particular schools. For this reason, Government supports the gradual transfer to the school level of decision-making powers relating to the school allocation. This must obviously occur in a controlled manner, in accordance with the important Sections 19 to 22 of the SASA, and in such a way that public funds are not squandered, and are spent in a manner that fully supports the national curriculum.
91. Government will determine the level of the school allocation, and optimise the translation of the school allocation into resources that schools can utilise, on the basis of five key considerations:
- (a) The rights of learners with regard to schooling.
 - (b) What the minimum basic package of school inputs is in order to make quality education a possibility. With regard to this consideration, Government acknowledges that in striving for equity in education, there is a need to spend more on education for the poor, and that the basic minimum package may vary with factors such as socio-economic context.
 - (c) Prices of goods and services required by schools.
 - (d) The distribution of income and poverty in the country, including the greater ability of certain communities to make private contributions to the schooling process. With regard to

this consideration, it is recognised that the poor in South Africa are not all equally poor, and that it may be necessary for the state to deal with the problem of poverty differentially.

- (e) The overall budget of Government.

Background

92. A school allocation for South African public ordinary schools was established through the 1998 publication of the National Norms and Standards for School Funding. It was first implemented in 2000 by PEDs, and represented a major innovation in South African school funding both in terms of financing systems and pro-poor resourcing.
93. During the period 2000 to 2003 major lessons were learnt with respect to the pro-poor school allocation. On the side of implementation, lessons were learnt regarding the required management training for schools, the required financial accounting systems, and the importance of understanding how best to use the allocation in the interests of school improvement and the support of the curriculum. On the side of policy, it became clear that though the 1998 policy was fundamentally correct, certain policy improvements were needed. In particular, inter-provincial equity emerged as a key policy concern. Two major assessments, in 2001 and 2003, focussing specifically on the school allocation were conducted. Moreover, in 2003 the DoE published an assessment of the overall system for the resourcing of schools. This assessment led to the 2003 Plan of Action: Improving access to free and quality basic education for all. These documents are milestones in our building of a post-apartheid schooling system, and they strongly inform this amended policy on the school allocation.

Inputs that may be covered by the school allocation

94. This sub-section describes which items may be covered by the school allocation. The description is not intended to be unnecessarily restrictive or prescriptive. Nor does the description exclude the use of state funds other than the school allocation for the items mentioned. Instead, this description should guide the state in determining the level and distribution of the school allocation, and schools in determining the utilisation of the allocation. This sub-section does not in any way place the state under the obligation of ensuring that the cost of all the items listed here should be fully covered by the school allocation, given that the list covers the range of possibilities, and not a set of core items.
95. In general, the school allocations are intended to cover non-personnel recurrent items and small capital items required by the school as well as normal repairs and maintenance to all the physical

infrastructure of the school. Moreover, the school allocation is primarily and exclusively intended for the promotion of efficient and quality education in public ordinary schools.

96. The following list provides examples of items that the school allocation may cover, and a categorisation of these items. It should be noted that the items are mentioned serve as examples, and do not constitute all the possible items. The definition of a capital item is as per Treasury regulations (currently, any item exceeding a value of R5,000 per item is defined as a capital item).

(i) Learning support materials (LSMs), including textbooks, library books, charts, models, computer hardware and software, televisions, video recorders, video tapes, home economics equipment, science laboratory equipment, musical instruments, learner desks, chairs. (These items, and the ones under (ii) to (iv) below, would typically support the SASA Section 21(c) function.) This category is subdivided into capital items and non-capital items.

(ii) Non-LSM equipment, including furniture other than learner desks and chairs, paper copier machines, telephone sets, fax machines, intercom systems, equipment for connectivity within the school and to the Internet, hardware tools, cleaning equipment, first aid kits, overalls for cleaners and ground staff, sporting equipment, electrical accessories. This category is subdivided into capital items and non-capital items.

(iii) Consumable items of an educational nature, including stationery for learners.

(iv) Consumable items of a non-educational nature, including stationery for office use, paper, cleaning materials, petrol, lubricants, food.

(v) Services relating to repairs and maintenance, including building repair work, equipment repairs and maintenance, light bulbs. (These items would typically support the SASA Section 21(a) function.)

(vi) Other services, including workshop fees, TV licences, Internet service providers, school membership of educational associations, postage, telephone calls, electricity, water, rates and taxes, rental of equipment, audit fees, bank charges, legal services, advertising, security services, public or scholar transport, vehicle hire, insurance, copying services. (These items would typically support the SASA Section 21(d) function.)

97. In view of the fact that schools are not equally subject to the legacy of apartheid inequities, population increases and unexpected calamities, the DoE and the PEDs must pursue resourcing

mechanisms other than the school allocation in order to deal with the following shortages of the items referred to in paragraph 96:

- (a) Shortages of LSMs and equipment where the shortage is clearly and directly linked to historical expenditure inequities.
- (b) Shortages of of LSMs and equipment, and in particular shortages of learner desks, learner chairs and textbooks, where the shortage is clearly and directly linked to a recent and significant increase in the enrolment of the school.
- (c) Urgent building repair needs which are clearly and directly linked to historical expenditure inequities.
- (d) Shortages resulting from calamities such as fire or floods.
- (e) Start-up resource requirements linked to the approved introduction of new grades into existing schools, or the establishment of completely new schools.

98. Nothing in this policy prevents PEDs or SGBs from devoting funds derived from the school allocation towards needs described in paragraph 97, if this is regarded as being in the interests of education in the school, and if this occurs in accordance with the general policy governing the school allocation. An SGB may, for instance, approve the use of the school allocation for urgent building repair needs arising out of a natural calamity. A PED may establish a system whereby schools are reimbursed at a future date for utilising funds from the school allocation for non-intended expenditure of a non-personnel nature. Such a system of reimbursement must be transparent and treat all schools equally. Schools do not have an automatic right to this type of reimbursement outside of, or in the absence of, such a system in the province.

99. The school allocation may not be used to cover the cost of personnel and new buildings.

The resource targeting list

100. This sub-section describes the 'resource targeting lists' that PEDs must maintain as a basis for the pro-poor distribution of the school allocation budget. The resource targeting list is a list of all the public ordinary schools in the province, sorted from poorest to least poor. The principle is followed that, ideally, communities are best served by the schools closest to them. It is precisely for this reason that the preferential public funding of schools in poorer communities is regarded as a priority for Government. However, exceptions to this principle are also contemplated in this sub-section.

101. The PED must assign to each school a school poverty score that will allow the PED to sort all schools from poorest to least poor. The principles governing the determination of the school poverty score are the following:

- (a) The score should be based on the relative poverty of the community around the school, which in turn should depend on individual or household advantage or disadvantage with regard to income, wealth and/or level of education.
- (b) The score should be based on data from the national Census conducted by StatsSA, or any equivalent data set that could be used as a source. The beneficiaries of the school allocation, for example schools or districts, should never be the source of the data, in order to avoid undesirable incentives to distort information.
- (c) The derivation and calculation of the score should be sufficiently comprehensive to provide a reasonable measure of the relative poverty of the school community. However, it should not be the intention to incorporate the complete range of poverty indicators in the score. The score should moreover be constructed to be as transparent and generally understandable as possible.
- (d) The basic methodology behind the score should be national in order to promote a pro-poor funding framework that treats equally poor schools equally, regardless of the province they find themselves in.

102. The following steps should be followed in the determination of the school poverty score:

- (a) Each school must be linked to a specific geographical area that can be considered, for the purposes of these determinations, the catchment area of the school. Where Census data is used, the geographical area would be the set of enumerator areas or place names closest to the particular school. Different levels of the schooling system, for example primary schools and secondary schools, would be dealt with separately. The DoE may determine precise rules for this step after consultation with PEDs.
- (b) Variables from the data set relating to households or individuals must be selected to inform three different indicators of poverty: income; dependency ratio (or unemployment rate); and level of education of the community (or literacy rate). The DoE may change this set of indicators after consultation with the PEDs.
- (c) Variables from the data set, and the indicators of poverty, must be weighted, for the purposes of arriving at a final poverty score for each specific geographical area, corresponding to each school. The DoE will determine the weightings that should be used.

103. The Provincial Departments of Education must, as a first priority, aim to provide schooling to communities in quality schools that are

geographically accessible for learners. Linked to this priority, is the imperative to ensure that preferential school funding in poorer communities translates into effective interventions and optimal combinations of inputs that assist in combating historical disadvantage. However, PEDs may deviate from this principle, and may deviate from the school poverty score methodology described in paragraph 102, in the following circumstances:

- (a) There are inadequate places in local schools, and the PED has determined that the community should make use of schools at a distance from the local community.
- (b) The PED has requested parents to make use of a school other than the local school, where the local school is suffering severe and temporary problems relating to, for instance, the quality of teaching and learning.

104. The exceptional circumstances referred to in paragraph 103 may permit the use of an approach other than the one described in paragraph 102 in order to determine a school's poverty score. In particular, the provision that it is the poverty of the community around the school that should be the determining factor, might be waived. Where a PED has determined that learners should attend a school other than the local school, the PED could, for instance, expand the community of the receiving school so that it included households from the community from which learners originated. Any deviation from the approach described in paragraph 102 must be effected transparently, and uniform criteria must apply to all similar deviations within the same province. PEDs must register deviations in a provincial register that provides details on each deviation, including the justification for the deviation. Such a register must be available for scrutiny by the public and monitoring authorities such as the DoE.
105. A school may apply to the PED for a deviation of the type described in paragraph 103 to be effected for that school, where the school believes that it warrants special consideration. PEDs must establish transparent and fair procedures for dealing with such applications from schools, in line with paragraph 104.
106. A school may dispute the correctness of the poverty score assigned to it through representation to the Head of Department. PEDs must establish transparent and fair procedures to deal with such queries regarding technical accuracy. These procedures should not exceed six months in duration.
107. PEDs must on an annual basis, subject to the availability of new data which is sufficiently reliable, consider reviewing the poverty scores of schools and/or the poverty ranking of a school and make the necessary adjustments to effect equity. Those allocations of schools negatively affected by any such changes should be changed in a phased manner.

The determination of nationally progressive school allocations

108. This sub-section describes how PEDs should use the resource targeting list, the table of targets for the school allocation (the 'targets table') and the national poverty distribution table (the 'poverty table') to determine the school allocation for each school.
109. The following 'table of targets for the school allocation' or 'targets table' establishes target per learner amounts for the school allocation. Column A provides the percentages that underlie the pro-poor funding approach. For example, the first national quintile (or one-fifth) of learners should receive 30% of funding, which is six times more than the 5% of funding which should go towards the least poor quintile. Column B specifies the target per learner school allocation amount in rands for each of the years 2007, 2008 and 2009. Column B furthermore specifies what the average per learner target value would be for the country as a whole. The 'no fee threshold' amount appearing in column B indicates the per learner amount that Government considers minimally adequate for each year. For 2007, the no fee threshold is set at R554, and for the following two years inflationary increments have been calculated to give R581 and R605. Column C indicates the maximum percentage of learners in each national quintile that could be funded to the no fee threshold level. Column C provides an indication of both the possibility of adequate resourcing without school fees, and the percentage of learners which could be exempted from the payment of school fees, given the existence of fees. For example, in 2007 in national quintile 5, if school fees were used to finance the needs of 78% of learners, then 22% of learners could be financed through the state's school allocation, in other words 22% of learners could be fully exempt from the payment of school fees.

Figure 2. The targets table
National table of targets for the school allocation (2007-2009)

	A	2007		2008		2009	
		B	C	B	C	B	C
NQ1	30.0	R 738	100%	R 775	100%	R 807	100%
NQ2	27.5	R 677	100%	R 711	100%	R 740	100%
NQ3	22.5	R 554	100%	R 581	100%	R 605	100%
NQ4	15.0	R 369	67%	R 388	67%	R 404	67%
NQ5	5.0	R 123	22%	R 129	22%	R 134	22%
Overall	100.0	R 492	89%	R 517	89%	R 538	89%
No fee threshold		R 554		R 581		R 605	

110. The table appearing in paragraph 109 covers the school allocation targets to the year 2009 only. The Minister, in consultation with the Minister of Finance, will release targets relating to years beyond

2009, and may change previously released targets, depending on circumstances. The Minister would publish in the Government Gazette, on an annual basis, the new column B targets for the new outer year. For instance, in 2007 the Minister would publish the column B targets applicable to 2010. This is to promote predictability and better medium term planning in the schooling system. Changes to previously released targets could be made to deal with factors such as unexpected changes in the inflation rate. The Minister may revise the distribution between national quintiles contained in column A. The Minister may revise the no fee threshold amounts, after consultation with the Minister of Finance. Revisions should occur on the basis of emerging research into the costs of schooling in different socio-economic contexts, changes in the socio-economic profile of the country and the overall budget of Government. The Minister will release for public comment a report on the methodology employed whenever the no fee threshold is altered, and will take into consideration the ensuing comments. The Department of Education must actively promote research that can inform optimal school allocation budgets, and an optimal distribution of this budget. Should research into costs, in combination with imperatives around equity, efficiency and compulsory schooling, indicate a need for a no fee threshold that is differentiated by grade, the Minister may implement such differentiation in the targets table.

111. Considering that poverty is unevenly spread across South Africa, and that it is Government's intention to establish targets that treat equally poor learners equally, regardless of the province they find themselves in, province-specific poverty data should be taken into account. The following 'national poverty distribution table' or 'poverty table' should be used by PEDs in determining how the target table in paragraph 109 finds expression in each province. For example, Eastern Cape must consider the national quintile 1 target to be applicable to as many schools on the resource targeting list as it takes to cover 34% of learners, starting from the poorest school. The national quintile 2 target would be applicable to the following schools on the resource targeting list, up to the point at which the next 26% of learners would be covered. The national quintile 5 target would be applicable to only as many schools on the non-poor end of the resource targeting list as it takes to cover 11% of learners. The data in this table is based on household income data supplied by National Treasury.

Figure 3. The poverty table
National poverty distribution table

	National quintiles					Total
	1 (poorest)	2	3	4	5 (least poor)	
Eastern Cape	34.8%	21.6%	21.0%	11.6%	10.9%	100%
Free State	30.8%	14.9%	20.1%	18.8%	15.4%	100%
Gauteng	10.5%	11.4%	27.4%	27.2%	23.6%	100%
KwaZulu_Natal	24.2%	18.8%	25.6%	17.3%	14.1%	100%
Limpopo	34.0%	22.3%	24.9%	11.6%	7.2%	100%
Mpumalanga	16.7%	20.2%	29.8%	19.9%	13.5%	100%
Northern Cape	26.3%	17.7%	21.6%	14.8%	19.6%	100%
North West	22.7%	15.2%	30.5%	20.5%	11.0%	100%
Western Cape	6.5%	8.0%	23.1%	27.7%	34.6%	100%
South Africa	20.0%	20.0%	20.0%	20.0%	20.0%	100%

112. The Minister, in consultation with the Minister of Finance, will review the national poverty distribution table on an annual basis and, when necessary, will publish updated versions of this table in the Government Gazette.
113. In order to calculate the target school allocation for each individual school for the following year, the PED must multiply the relevant per learner target from the targets table by the enrolment of the school in the current year. For example, a school serving 100 national quintile 2 learners (defined as such according to the criteria laid out in paragraph 111) in 2007, would have a target school allocation of 100 multiplied by R711 or R71,100, in 2008.
114. Each PED must, as part of its ongoing MTEF budgeting process, calculate the school allocation budget implied by the national targets, and compare this amount to the actual school allocation budget amount available in the MTEF budgets. If the target amount is not equal to the actual amount, one of the following sets of procedures should be followed:
- If the actual amount exceeds the target amount, the PED must ensure that, as a minimum, each school receives the school allocation implied by the national targets. A PED may use the difference between the actual amount and the target amount to create a smoother distribution, or a continuous curve, so that less abrupt per learner funding shifts occur between one school on the resource targeting list and the next. However, such smoothing should not result in any school receiving less than the target per learner amount applicable to that school.
 - If the target amount exceeds the actual amount, the PED and the DoE, in collaboration with the National and Provincial Treasuries, must jointly devise a plan for attaining the targets in the earliest possible year. This plan must include details on

how, in the interim, the actual budget will be distributed across the national quintiles. Such a plan must prioritise the attainment of targets in quintiles 1 and 2, and for learners in Grades 1 to 9.

115. Each PED must provide a recommended breakdown of the school allocation, for each school, according to the three Section 21 functions of SASA that imply expenditure and according to the breakdown provided in paragraph 96. This breakdown should be communicated in all official letters to schools indicating what their school allocations are. The three relevant Section 21 functions are restated here, with some comments:

Section 21(a) of SASA: To maintain and improve the school's property, and buildings and grounds occupied by the school.

Section 21(c) of SASA: To purchase textbooks, educational materials or equipment for the school.

Section 21(d) of SASA: To pay for services to the school.

It should be noted that though school hostels are mentioned in Section 21(a) of SASA, funding of school hostels is dealt with in the next section of this policy, titled 'Hostel costs'.

116. In addition to the breakdown referred to in the previous paragraph, and apart from the financial directions issued in terms of Section 37 of SASA, PEDs may determine other conditions governing the use of the school allocation where this is deemed necessary for the promotion of better school management. The other conditions would apply to all schools, whether they have SASA Section 21 functions or not. All these conditions must be communicated to schools in the official letters referred to in the previous paragraph.

The school allocation and accountability

117. The effective implementation and monitoring of the school allocation requires timely provision of accurate information by the DoE, PEDs and schools. This sub-section explains key obligations in terms of information provisioning and accountability, and provides some important timeframes.
118. The DoE must provide the Minister with sufficient data and research to enable the Minister to publish, in the Government Gazette, school allocation information (as described in paragraph 109) for the next three years, by 1 August of each year. Moreover, by this date, the Minister should publish information on what quintiles or parts of quintiles will comprise no fee schools in the following school year, in terms of paragraph 157, and Section 39(7) of SASA.
119. PEDs must process enrolment data, school poverty data (as described in paragraph 101), provincial budget data and the school allocation data released by the Minister in order to determine provisional school allocations for each school for the next three

years. The provisional school allocations for the next three years must be communicated to schools by 30 September of each year. This communication must include information on which national quintile individual schools find themselves in, what the national per learner target amount applicable to that national quintile is, what the rationale is for the national targets published by the Minister, what the national no fee threshold is and what calculations were performed by the PED to arrive at each school's school allocation amount. PEDs must furthermore submit to the DoE the data and calculations used to arrive at the provisional school allocations for each school, so that the DoE can be in a position to monitor policy compliance, make inter-provincial comparisons, and advise PEDs of national best practice. The submission of the information to the DoE must occur by 30 September.

120. By 30 September of each year, MECs must publish in the provincial Government Gazette the entire resource targeting list for the province. This list must include, as a minimum, school EMIS numbers, names of schools, the poverty score of each school, and the national quintile in which each school is situated. The list must also include SASA Section 21 functions allocated to each school in terms of paragraphs 125 to 130. If the national determination, in terms of paragraph 161, of the finalised list of no fee schools has occurred, and a formal communication to the MEC has occurred in this regard, the provincial resourcing targeting list should specify which schools are no fee schools. It is important that MECs and PEDs should not release any information on no fee schools that deviates from the national list. PEDs must furthermore make all of this information available to the public and schools on an ongoing and updated basis through a medium such as the Departmental website.
121. Due to the fact that the school year and the Government financial year are different, the final school allocation for any school year can only be determined during the course of the school year in question, after the Provincial Legislature has approved the budget for the PED. The final school allocation for the current year must be communicated to schools during the two weeks following the finalisation of the PED budget by the Provincial Legislature. In order to facilitate proper planning, PEDs should strive to ensure that the final school allocation communicated to schools in terms of this paragraph deviates as little as possible from the provisional figures provided on 30 September of the previous year.
122. The DoE, PEDs and schools must report on the usage of the school allocation, and the DoE and PEDs must furthermore report on the determination of the school allocation, within their respective annual reports. Reports produced by schools must explain how the spending of the school allocation supports the school development plan, quality education and learner performance. The DoE and PEDs must also produce analyses and proposals on how the school allocation

can further enhance education delivery, including school effectiveness and learner performance. Analyses must moreover be produced on the impact of the school allocation on general socio-economic transformation, including black empowerment amongst manufacturers and suppliers of school materials. These analyses and proposals must be widely disseminated to encourage public debate and participation.

123. The DoE and PEDs must work with National Treasury and its provincial counterparts to ensure that the charts of account governing PED and school finances support the implementation of these norms. In particular, it must be clear from PED accounts what non-personnel non-capital expenditure on schools was occurring outside the framework of the school allocation, for instance in terms of paragraph 97. Furthermore, school accounting systems should allow for differentiation of expenditure according to SASA Section 21 functions, and any other required classifications, partly in order for the provisions in paragraph 140 below to be implemented.
124. The DoE and PEDs will collaborate to ensure that every school in the country has a set of policy implementation manuals and tools relating to the school allocation. This set must include, for example, the policy documents themselves, explanatory manuals, and tools for educating the school community about the purpose of the school allocation. Materials must be available in all official languages. Materials applicable to all provinces will be made available on the website of the DoE. The DoE and PEDs must design and roll out training programmes in the use of the policy implementation tools.

The list of Section 21 status

125. This sub-section deals with the SASA Section 21 functions that may be allocated to schools by the Head of Department, and the maintenance by the PED of the list of Section 21 status used for determining mode of resourcing to schools with respect to the school allocation.
126. The SASA makes provision for public school governing bodies to become progressively more responsible for managing aspects of recurrent expenditure. Section 21 provides that, subject to the Act, a School Governing Body may apply in writing to the Head of Department to be allocated any of the SASA Section 21 functions.
127. The HOD must approve a governing body's application for Section 21 functions, conditionally or unconditionally, unless the SOB does not have sufficient capacity to undertake the functions effectively.
128. A MEC may determine that some governing bodies may exercise one or more functions under Section 21, even if they have not applied for them. This is permitted only if the governing bodies have the capacity to perform the functions effectively, and there is a

reasonable and equitable basis for allocating the functions to them (Section 21(6) of the Act).

129. In order to guide the actions of the MEC, the HOD and an affected SGB, it is necessary to establish an objective test of governing body capacity in terms of Section 21 of the Act. DoE, in consultation with PEDs must, therefore, devise a managerial capacity checklist, for approval by the HOD. The checklist will include items relating to the capacity to handle and account for public funds, the capacity to meet ongoing contractual obligations to suppliers of goods and services, and the ability to make financial decisions that are educationally sound. The criteria used in developing such a list must be transparent and public.
130. Each PED must maintain a 'list of Section 21 status' containing all public ordinary schools in the province. This list must specify the Section 21 status of each school on the list, in other words what Section 21 functions have been officially allocated to each school. All the Section 21 functions of SASA, including additional functions introduced through amendments, must be considered in the list of Section 21 status. The list must be updated each time functions are granted to or withdrawn from schools, and must be easily accessible to the public. The number of schools with one or more Section 21 functions is expected to grow as more schools acquire the requisite capacity.

Resource transfer procedures where SASA Section 21 functions have been allocated

131. This sub-section deals with the resource transfer procedures relating to the school allocation, where SASA Section 21 functions (a), (c) and/or (d) have been allocated.
132. Schools which, according to the list of Section 21 status, have been allocated one or more of the three SASA Section 21 functions, will receive a single transfer in accordance with their national quintile, their enrolment, the national table of targets for the school allocation, and the SASA Section 21 functions that have been allocated to the respective schools. A recommended breakdown into cost categories, in terms of paragraph 115, must accompany the transfer. If a school has not been allocated all of the three SASA functions in question, the transfer will only include funds for the allocated functions, determined in terms of paragraph 115.
133. School governing bodies that have been allocated the relevant SASA Section 21 functions may carry out their own procurement and may deal directly with suppliers and contractors for the relevant budgeted items in accordance with standard procurement procedures, the financial directions issued in terms of Section 37 of the SASA and paragraph 116 of this policy. They must keep documents as evidence of correct dealing with such suppliers and contractors, and records of

how the materials and services were used, and produce such documents or records at the request of officials from the PED and for audit purposes.

Resource transfer procedures where SASA Section 21 functions have not been allocated

134. Although it is Government's aim to improve school management capacity, and to make the assumption of Section 21 functions possible across all schools in the country, Government also recognises that this is a long-term task, and that the system will continue to include many schools without Section 21 functions, or so-called non-Section 21 schools, for many years. It will therefore continue to be necessary for the DoE and PEDs to work together to improve the systems and procedures that resource non-Section 21 schools with respect to the school allocation.
135. There is no single solution for the resourcing of non-Section 21 schools. Many different approaches are pursued by PEDs, and a number of different improvements to current practice have been proposed. A common approach is for PEDs to procure resources in bulk for schools, relative to the size of the school allocations, and to manage the delivery of items to schools. This approach can involve varying degrees of determination by the schools regarding what resources are procured. Where this approach is pursued, it is important for schools to receive adequate information regarding the monetary value of the resources they receive. This need will increase with the establishment of national targets for the school allocation, as school communities will in many cases have a clearer idea than before of what the size of the school allocation is. The DoE and PEDs must collaborate to improve accounting systems that can provide schools with the required expenditure data.
136. The DoE and PEDs must continue to explore innovative solutions to improve the resourcing of non-Section 21 schools. Joint control by schools and the PED over individual school accounts, or special district-level accounts, must be considered. Moreover, solutions whereby the PED pays suppliers from whom schools have ordered goods should be considered. The aim should be to develop the capacity of the school to determine its own resource mix within the policy framework, to ensure that goods reach schools on time, and to combat the inefficient utilisation of resources, as well as excessive prices for school inputs. These aims should be pursued within the overall policy intention of a pro-poor school allocation, as expressed in this policy.
137. PEDs must take adequate measures to ensure that expenditure occurs according to school budgets within the relevant MTEF financial year, where SASA Section 21 allocations have not been allocated. This is in view of the fact that Provincial Treasuries generally do not

allow the roll-over of funds from one financial year to the next. In this regard, it is important that non-section 21 schools should not be disadvantaged relative to those schools that receive the transfer in terms of paragraph 132. In order to facilitate the purchase of, for instance, equipment, which may necessitate some saving from one year to the next, PEDs should explore budgetary solutions that allow schools to plan upfront for such expenditure without necessitating roll-overs at the Provincial Treasury level.

138. Schools with some, but not all, of the SASA Section 21 functions (a), (c) and (d) must be resourced on the basis of this sub-section (paragraphs 134 to 138) and the previous sub-section (paragraphs 131 to 133).

Financial controls where Section 21 functions have been allocated

139. Schools which receive the school allocation as a monetary transfer into the school fund must administer this money in accordance with the SASA. The PEDs must ensure that the financial management directions issued to all schools in terms of Section 37 of the SASA are adequate, and that schools comply with these directions.
140. Schools must be guided by the breakdown in the school allocation determined in terms of paragraph 115. PEDs must monitor compliance with, and deviations from these breakdowns. Where schools spend substantial amounts of private income, in addition to income from the school allocation, PEDs must ensure that total expenditure according to the breakdowns is at least as great as what was determined in terms of paragraph 115. In particular, PEDs must promote adequate expenditure on educational items, and strive to ensure that the SASA Section 21(c) function relating to educational inputs is not under-funded. Schools that deviate from the PED-determined breakdown, must have justifiable reasons for doing so, and should only under-budget for the educational items relative to the recommended breakdown after consultation with and approval from the PED. Where PEDs observe substantial deviations from the recommended breakdowns in the school allocation, in particular deviations where the educational inputs suffer and proper schooling is consequently placed at risk, PEDs should seriously consider implementing SASA Section 22, dealing with the withdrawal of SASA Section 21 functions.

Transition and commencement issues

141. This sub-section contains recommendations regarding the transition from previous to new policy imperatives with respect to the school allocation.

142. It is important that in the planning around the school allocation, all the various items linked to this fund, as described in paragraphs 95 to 99, be taken into account. For example, if utility charges had been excluded from the school allocation in the past, it would be important for these items to begin to become included.
143. The resource targeting lists of the PEDs should undergo a gradual transition with respect to the new policy imperatives. Poverty scores according to the new methodology should be determined during 2007. However, changes in the position of schools on the resource targeting list, in particular movement from one national quintile to another, should be phased in over some years. It should be noted that this principle of gradual change should apply even without changes to the methodology, as the relative poverty of communities does not remain static.
144. In the interests of stability, the implementation of this policy should not result in any school receiving a smaller school allocation in nominal rand terms than it did in the past, or than it was promised for the future.
145. The amended policy provisions relating to the school allocation become applicable from 1 January 2007.

Hostel costs

146. **Records.** Schools with hostels must keep a separate account for all recurrent costs associated with hostels, and a record of the number of learners staying at each hostel. Such accounts and records will be subject to unannounced audits by officials of the PED.
147. **Hostel fee.** The school must charge each learner staying in the hostel a hostel fee equal to the average running cost per learner in the hostel. No blanket cross-subsidisation of hostel costs from fee income is permitted. However, if the SOB wishes to exempt particular learners from hostel fees, it may do so by recording the necessary book-keeping transfer.
148. **Hostel subsidy.** The PED must, in turn, set aside a budget item for hostel subsidies. These hostel subsidies are not a part of the school allocation referred to in paragraphs 85 to 145. Schools with hostels will be paid pro rata out of this budget for each of their learners
- (a) whose transport time to the school is greater than 1½ hours;
 - (b) if there are no available school places near the learner's parents' place of residence; and
 - (c) whose parents cannot afford the per-child hostel cost.
149. The PED may adjust these criteria in order to ensure that the subsidy per learner is meaningful, while recognising that this may decrease the number of learners thus covered, requiring a tightening of the targeting criteria.

150. Subsidies for hostel costs incurred by learners with special education needs enrolled in ordinary public schools will be provided by the Provincial Education Department in accordance with the overall funding approach used for such learners.

6. FEE EXEMPTIONS IN PUBLIC SCHOOLS

151. The SASA requires the Minister of Education to make regulations about the equitable criteria and procedures for exemption of parents who are unable to pay school fees, and to identify schools that will be no fee schools (Section 39). This section provides the basic principles governing school fee exemptions and the principles and procedures with respect to no fee schools, whilst the regulations, provide details on the exemptions calculations and how the exemptions policy should be implemented.

Introduction

152. School fees provide two benefits for the schooling system. Firstly, they provide a mechanism for raising revenue amongst parents who can afford to make this contribution, which in turn provides fiscal space for the state to implement preferential funding for poor schools. Secondly, school fees, even if they are set at a low and nominal level, encourage parent participation in school governance, and promote accountability of schools to the communities they serve.

153. School fees must not be allowed to become an obstacle in the schooling process, or a barrier preventing access to schools, especially as far as the most marginalised are concerned. Government believes that in the schools serving the poorest communities, there should be no school fees. Moreover, where schools do charge school fees, proper parent participation in the fee-setting process is critical. Effective criteria determining which schools should not charge school fees, as well as an effective exemptions policy to protect those who are less advantaged economically within fee-charging schools, are of utmost importance.

154. The amended policy on school fee exemptions, contained in these norms and in the regulations governing fee exemptions, is informed by a rigorous and participatory process of re-assessment of the school fee situation, culminating in Report to the Minister: Review of the financing, resourcing and costs of education in public schools and Plan of Action: Improving access to free and quality basic education for all, both published in 2003 by the DoE. The DoE's commitment to the global Education for All goals strongly informs this amended policy.

No fee schools

155. This sub-section deals with schools that may not levy compulsory school fees, referred to as 'no fee schools' in Section 1 of SASA. No fee schools are an integral part of Government's strategy to alleviate the effects of poverty and redress the imbalances of the past.

156. A school is a no fee school, and compulsory school fees may consequently not be charged in the school, if both of the following two criteria apply:

- (a) The school has, in terms of paragraph 111, been placed in a national quintile, or in a part of a quintile, that has been identified by the Minister, in terms of paragraph 157 and Section 39(7) of SASA, as being in need of a total prohibition on compulsory school fees.
- (b) The school receives a per learner school allocation, as defined in paragraphs 87 and 113, that is greater than or equal to the no fee threshold for the year in question referred to in paragraph 109. This criterion is aimed at ensuring that a critical level of public funding is reached before private funding in the form of school fees is removed. The per learner school allocation amount that should be compared against the no fee threshold is the amount implicit in the communication made to schools in terms of paragraph 120.

157. The Minister shall, in terms of Section 39(7) of SASA, annually determine those quintiles or parts of quintiles where, subject to condition (b) in paragraph 156, schools may not implement compulsory school fees in the following school year. This information should be made public by 1 August of each year, concurrently with the school allocation information referred to in paragraph 118.

158. In order for the Minister to make the determination referred to in paragraph 159, whilst applying condition (b) of paragraph 156, MECs must supply certain background information relating to the financing of schools to the Minister in advance. Specifically, MECs must inform the Minister of the school allocation amounts budgeted for in the MTEF budgets by quintile. It should be clear from this information whether the province is able to afford the school allocation targets referred to in paragraph 109. The information should reach the Minister by 15 July.

159. The determination by the Minister referred to in paragraph 157 may involve the determination of schools with no fee grades, in other words the removal of compulsory school fees from certain grades only. This provision allows the Minister to take special measures that will support compulsory attendance of seven to fifteen year old learners in terms of Section 3 of SASA. The determination of no fee grades for certain schools will be subject to the condition of adequate state funding referred to in paragraph 156.

160. In accordance with Section 39(9) of SASA, MECs must identify which schools qualify as no fee schools, and must determine the details, if any, regarding no fee grades. The details of schools which are identified as no fee schools by the MEC must be submitted to the Minister of Education by 1 September. Details must include, as a

minimum, school EMIS numbers, names of schools, and physical addresses of schools.

161. In accordance with Section 39(10) of SASA, the Minister must assess the validity of the information on no fee schools submitted by MECs, and must publish a valid list of schools, organised by province, in the Government Gazette. This must occur by 30 September. The list of no fee schools published by the Minister is the definitive list of no fee schools in the country for the following school year.
162. In addition to the publication of the list described in paragraph 161, the Minister and MECs must ensure that additional communication strategies are implemented in order to make the identity of no fee schools, and the implications of this to parents, as clear as possible. MECs should ensure that the identity of no fee schools is specified in the provincial Government Gazette referred to in paragraph 120.
163. If, in spite of the planning steps outlined in paragraphs 157 and 158, a no fee school does not receive a school allocation that is at least as high as the no fee threshold then, in terms of Section 37(11) of SASA, the school may charge school fees up to an amount equal to the difference between the no fee threshold and the school allocation actually received. The planning process should be sufficiently rigorous to prevent any such contingencies. However, should the funding of no fee schools for some reason not reach the no fee threshold level, it would be important for parents to have a way of dealing with this contingency. Importantly, the school allocation that should be considered the received school allocation, is the sum of any monetary transfer of this allocation, and the monetary value of goods procured by the PED on behalf of the school, in line with paragraphs 134 to 138.

Automatic exemptions for individual learners

164. This sub-section deals with instances where the status of the individual learner makes school fees with respect to that learner undesirable, and hence an automatic exemption for that learner a necessity. The provisions in this sub-section apply to all schools charging school fees in terms of SASA Section 40. Should a learner be subject to a no fee situation in terms of paragraphs 155 to 160, then this sub-section becomes redundant.
165. An automatic exemption applies to any learner who is an orphan or who has been abandoned by his or her parents.
166. An automatic exemption applies to any learner for whom a poverty-linked state social grant is paid. A poverty-linked state social grant is any state social grant distributed explicitly to alleviate poverty, and would include all social grants issued on the basis of a means test.
167. Details regarding, for instance, the procedures for establishing automatic exemptions, and for nullifying them when the conditions in

paragraphs 164 to 166 no longer apply, are explained in the exemptions regulations.

Calculations to determine total and partial exemptions

168. Parents may be fully or partially exempted from the payment of school fees, even if they do not qualify for exemptions in terms of the foregoing two sub-sections. It is principally the income of individual parents and households, relative to school fees and other education expenses that is used to determine eligibility to such total or partial exemptions.
169. The formulas for total or partial exemptions, explained in the exemptions regulations, are informed, amongst other things, by two important equity principles:
- (a) Within any school, the income threshold in rands below which parents qualify for total exemption, should be the same for all parents, regardless of the number of learners for which parents have been charged school fees. It must not be possible for there to be two parents within the same school, with the same income, where one parent is fully exempt from school fees whilst the other is not.
 - (b) Within any school, the income threshold in rands below which parents qualify for partial exemption, should depend partly on the number of learners for which parents have been charged school fees. The greater financial burden of having more than one learner for whom school fees are charged, should be recognised, especially insofar as the less advantaged are concerned.

Other types of fee exemptions

170. An SGB may grant fee exemptions in addition to the types referred to above, on condition that such exemptions are based on transparent and equitable criteria which take into account the need to alleviate the effects of poverty in the households of the school community.

7. SUBSIDIES TO INDEPENDENT SCHOOLS

Introduction

171. Every person has the right, in terms of the Constitution, to establish and maintain, at their own expense, an independent educational institution that does not discriminate on grounds of race and complies with Section 9(4) of the Constitution, is registered with the state, and maintains standards that are not inferior to standards in comparable public educational institutions. The provision does not preclude state subsidies for such institutions (Section 29(3) and (4)).
172. The SASA provides for the right of persons to establish and maintain an independent school, and for the registration of an independent school by the Head of Department, under conditions consistent with the Constitution. The Act enables the provincial MEC to grant a subsidy to a registered independent school, in terms of norms and minimum standards determined by the Minister of Education (Sections 45-46, 48).
173. The norms that follow are the first uniform national norms for independent school subsidies. They are intended to provide a stable and principled basis for MECs in all provinces, to decide the eligibility for subsidy and the level of subsidies for registered independent schools.
174. The national norms apply uniformly in all provinces. However, a provincial MEC may vary them, so long as their intent and spirit is maintained. The Head of Department must consult the national DoE on this matter.
175. The following norms embody conditions of eligibility for subsidy, and funding criteria for allocating subsidies.

Conditions of eligibility

176. An independent school may be considered for subsidy if it
- (a) is registered by the PED;
 - (b) has made an application to the PED in the prescribed manner;
 - (c) has been operational for one full school year;
 - (d) is a registered non-profit organisation in terms of the non-profit organisations Act, Act No. 71 of 1997.
 - (e) is managed successfully according to a management checklist determined by the PED, as described in paragraph 179;
 - (f) agrees to unannounced inspection visits by officials of the PED or person duly authorized by the PED; and
 - (g) has not been established in direct competition with a nearby uncrowded public school of equivalent quality.

177. In addition to the conditions in the previous paragraph, the following conditions apply to the secondary school phase. A secondary school phase may be considered for subsidy if–

- (a) its final grade 12 pass rate is 50% or more of full-time candidates writing the examination in the prior year ;
- (b) not more than 20% of Grade 11 learners are repeaters who took Grade 11 in the same school during the previous year;
- (c) not more than 20% of Grade 12 learners are repeaters who took Grade 12 in the same school during the previous year; and
- (d) it does not engage in practices that are calculated to artificially increase the school's grade 12 pass rate.

178. The Head of Department may vary conditions (a), (b) or (c) in the previous paragraph in response to good cause shown by a school to the Head of Department.

179. Each school requesting funding will be subject to a management checklist (which may be the same as, or based on, the checklist referred to in paragraph 129 above), which will be approved by the HOD after consultation with representatives of independent schools. In the event that the independent school sector could not agree regarding this checklist, the HOD will determine the checklist. This checklist will determine, amongst other things, whether the school is able to manage its finances responsibly. It must include indicators of sound management, such as whether the school keeps proper admissions and attendance registers, and maintains fee payment and other financial records. To be eligible for funding a school must subscribe to the checklist, and must allow unannounced inspections by officials of the PED, to ensure that the practices in the checklist are up-to-date. Refusal to allow an unannounced visit will result in forfeiture of further funding.

Funding criteria

Subsidies related to fees

180. For the purpose of this national policy, "fees" means any form of payment for registration and tuition made by a parent in relation to a learner's enrolment or attendance at an independent school. It includes the present annualised value of any past or future once-off payment, using a market rate of interest for investments of equal certainty. It also includes any other form of payment by a parent, or equity in the school taken by a parent, as a form of fee payment-equivalent. The highest level of fees normally charged at the school, as opposed to fees discounted for once-off payment, will be taken as representative. Additional costs associated with the normal course of instruction which learners are expected to follow are to be

considered fees, even if they are not formally called fees. However, payments for extra items or services, or for school materials that are procured by the school instead of having to be purchased by the parent, are not to be considered fees, as long as the cost of such items is similar to their open-market value.

181. For purposes of these norms, "primary" phase comprises grades 1 to 7, and "secondary" phase comprises grades 8 to 12.
182. In what follows, the level of annual fees as defined in paragraph 180 charged at primary phases and secondary phases of independent schools as of the date stated in paragraph 183 below will be taken as indicators of the socio-economic status of a school's community.
183. The initial date is January 1998. This date will be amended from time to time by the DoE by way of Government Notices in the month of January of any year. This date must be retroactive to the date of publication.
184. The subsidy category of schools based on the date in paragraph 183 will remain until a new date is published.
185. When a new date in paragraph 183 is published the PED will inform the independent schools eligible for subsidy of their relevant subsidy category for the year subsequent to the date of publication referred to in paragraph 183 during April or earlier of the year in which the notice referred to in paragraph 183 is published. To determine the subsidy category per school the separate provincial average estimate per learner in the primary and secondary phases of ordinary public schools, and the learner numbers according to the 10th Day/Snap Survey in the different school phases of the year mentioned in paragraph 183 must be used.
186. Schools established after the date in paragraph 183 and which qualify for subsidy will have their subsidy category determined through paragraph 188.
187. The Ministry's policy is to enable subsidies to be granted in relation to the socio-economic circumstances of an eligible school's clientele. The level of school fees charged by the primary or secondary phases of an independent school is taken as an objective, publicly-available criterion that correlates well with the socio-economic circumstances of the school's clientele for each of those two phases. Subsidy levels are therefore related to fee levels on a five-point progressive scale, as shown in Figure 4 below. Eligible schools charging the lowest fees will qualify for the highest level of subsidy. Schools charging fees, in excess of 2.5 times the separate provincial average estimates per learner in primary or secondary phases of ordinary public schools respectively, are considered to serve a highly affluent clientele, and 0% subsidy will be paid to them from public funds.

Figure 4. Allocation table for independent school subsidies	
School fee level as on the date in Paragraph 183	Level of subsidy from the PED in school year n, where n is initially the school year 2003, is equal to:
1. Up to 0.5 times (50%) of the separate provincial average estimate per learner in the primary and secondary phases of ordinary public schools ¹⁾ respectively in the fiscal year, following the date in paragraph 183.	60% of the separate provincial average estimate per learner in primary and secondary phases of ordinary public schools 2) respectively in the PED's fiscal year n/n+1.
2. Higher than 0.5 and up to 1.0 times the separate provincial average estimate per learner in the primary and secondary phases of ordinary public schools respectively in the fiscal year, following the date in paragraph 183.	40% of the separate provincial average estimate per learner in primary and secondary phases of ordinary public schools 2) respectively in the PED's fiscal year n/n+1.
3. Higher than 1.0 and up to 1.5 times the separate provincial average estimate per learner in the primary and secondary phases of ordinary public schools respectively in the fiscal year, following the date in paragraph 183.	25% of the separate provincial average estimate per learner in primary and secondary phases of ordinary public schools 2) respectively in the PED's fiscal year n/n+1.
4. Higher than 1.5 and up to 2.5 times the separate provincial average estimate per learner in the primary and secondary phases of ordinary public schools respectively in the fiscal year, following the date in paragraph 183.	15% of the separate provincial average estimate per learner in primary and secondary phases of ordinary public schools 2) respectively in the PED's fiscal year n/n+1.
5. Higher than 2.5 times the separate provincial average estimate per learner in the primary and secondary phases of ordinary public schools ²⁾ respectively in the fiscal year, following the date in paragraph 183.	0% subsidy.

Suffix 1) refers to the "Adjustments Estimates of Expenditure" (including planned increases in remuneration) as they apply to the sub programmes of primary and secondary phases of ordinary public schools separately as included in the programme structure of the same "Adjustments Estimates of Expenditure". The budget amounts included in the other sub-programmes under the programme: Public Ordinary Schools, must be added to the sub-programmes of primary and secondary ordinary public

schools in the ratio of the sub-programmes of primary and secondary ordinary public schools.

Suffix 2) refers to the provincial "Main Estimates of Expenditure Figures" (including planned adjustments to personnel costs) as they apply to the sub-programmes of primary and secondary phases of ordinary public schools separately and the learner numbers according to the 10th Day /Snap Survey of year n. The budget amounts included in the other sub-programmes under the programme: Public Ordinary Schools, must be added to the sub-programmes of primary and secondary ordinary public schools in the ratio of the sub-programmes of primary and secondary ordinary public schools.

188. PEDs will need to establish a procedure to deal with borderline situations. For example, if the average public school cost in a province is R2000, and an independent school charges fees of R1050, it will just miss being in the first (highest subsidy) category, even if its clientele is not different from that of a school charging, say, R950. PEDs may use the following criteria, in addition to any other relevant information submitted by the school, to judge whether a school falls into a certain category:

- (a) schools in the first (highest subsidy level) category would typically be located in townships, deep rural areas, or informal settlements and serving the residents in these areas.
- (b) schools in the second category would typically be in inner city or transitional suburban areas, catering largely for township and informal sector clientele or the urban lower middle class.
- (c) schools in the third and fourth categories would be middle and upper middle class schools with good facilities with a local clientele.
- (d) schools in the fifth category would be well established schools with excellent facilities and a national or regional clientele and very low learner: educator ratios.

189. Subsidies may be paid only in respect of grades 1-12. No other grades are eligible for subsidy for the time being. If the fee structure varies by grade, the enrolment-weighted average of the fees in all relevant grades will be taken as representative of each level.

190. The fee levels applying to the primary and secondary sections of a combined school may differ. The principal of such a combined school can approach the HOD with a request to lower its fees in either the primary or secondary sections so that it is the same for both the primary and secondary sections of the school in order to qualify for the same percentage subsidy in both the primary and secondary sections. The HOD may recommend a subsidy, if it is deemed in the interest of the school and the Provincial Education Department.

Subsidies in relation to PED budgets

191. The Ministry of Education is sensitive to the connection between the total cost of independent school subsidies and the overall budgetary position of a Provincial Education Department. Recent reductions in the overall funds available for independent school subsidies because of urgent budgetary expediency, should not become de facto policy by default. At the same time, PEDs must have latitude to vary budgetary allocations between programme areas, in relation to the total funds at their disposal, and the priorities established in terms of national and provincial policies.
192. A PED may, therefore, alter the fee levels and/or corresponding percentage subsidies levels except for the 0% subsidy level applicable to school fee level 5 in Figure 4 after consultation with the DoE, if the application of these norms would-
- (a) cause a PED's expenditure on subsidies to independent schools to deviate from a three-year historical moving average by more than 10 percent in real terms in any given year; or
 - (b) contribute to over-expenditure on the PED's budget in the year they are applied; or
 - (c) result in the total independent school programme receiving year-to-year budget cuts (or increases) in any given year that are significantly larger (or smaller) than other programme areas in the PED's budget.

Other deviations

193. Aside from deviations already discussed in this document, a PED may deviate from the subsidy and fee levels in these norms only on good cause shown to the DoE (see paragraph 174 above).

Date of subsidy payments

194. Subsidies will be calculated on a per learner basis according to the verified enrolment in the school at the beginning of each term.
195. PEDs must ensure that the first term's subsidy is paid no later than 1 April in each school year. Subsequent subsidies must be paid no later than six weeks after the beginning of each school term.

Monitoring and revision

196. The Ministry of Education, in co-operation with PEDs and representatives of independent schools, will monitor the application of these norms in order to:

- (a) monitor fee levels;
- (b) monitor subsidy levels;
- (c) ensure that the overall level of subsidy to independent schools is a reasonable percentage of the total education budget in a province, in relation to the relative size of the independent and public school sectors in the province, and other relevant considerations; and
- (d) ensure that national education policy objectives are being well served by the norms and their application.

197. In the light of an analysis of these matters, the Ministry, after due consultation, may amend or revise the norms.

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
Publications: Tel: (012) 334-4508, 334-4509, 334-4510
Advertisements: Tel: (012) 334-4673, 334-4674, 334-4504
Subscriptions: Tel: (012) 334-4735, 334-4736, 334-4737
Cape Town Branch: Tel: (021) 465-7531

Gedruk deur en verkrygbaar by die Staatsdrukker, Bosmanstraat, Privaatsak X85, Pretoria, 0001
Publikasies: Tel: (012) 334-4508, 334-4509, 334-4510
Advertensies: Tel: (012) 334-4673, 334-4674, 334-4504
Subskripsies: Tel: (012) 334-4735, 334-4736, 334-4737
Kaapstad-tak: Tel: (021) 465-7531

SOUTH AFRICAN SCHOOLS ACT NO. 84 OF 1996

[\[View Regulation\]](#)

[ASSENTED TO 6 NOVEMBER, 1996]
[DATE OF COMMENCEMENT: 1 JANUARY, 1997]

(Unless otherwise indicated)

(English text signed by the President)

This Act has been updated to <i>Government Gazette</i> 34620 dated 19 September, 2011.

as amended by

Education Laws Amendment Act, [No. 100 of 1997](#)

Education Laws Amendment Act, [No. 48 of 1999](#)

Education Laws Amendment Act, [No. 53 of 2000](#)

Education Laws Amendment Act, [No. 57 of 2001](#)

Education Laws Amendment Act, [No. 50 of 2002](#)

Education Laws Amendment Act, [No. 1 of 2004](#)

Education Laws Amendment Act, [No. 24 of 2005](#)

Education Laws Amendment Act, [No. 31 of 2007](#)

Basic Education Laws Amendment Act, [No. 15 of 2011](#)

ACT

To provide for a uniform system for the organisation, governance and funding of schools; to amend and repeal certain laws relating to schools; and to provide for matters connected therewith.

Preamble.—WHEREAS the achievement of democracy in South Africa has consigned to history the past system of education which was based on racial inequality and segregation; and

WHEREAS this country requires a new national system for *schools* which will redress past injustices in educational provision, provide an education of progressively high quality for all *learners* and in so doing lay a strong foundation for the development of all our people's talents and capabilities, advance the democratic transformation of society, combat racism and sexism and all other forms of unfair discrimination and intolerance, contribute to the eradication of poverty and the economic well-being of society, protect and advance our diverse cultures and languages, uphold the rights of all *learners, parents* and *educators*, and promote their acceptance of responsibility for the organisation, governance and funding of *schools* in partnership with the State; and

WHEREAS it is necessary to set uniform norms and standards for the education of *learners* at *schools* and the organisation, governance and funding of *schools* throughout the Republic of South Africa;

1. Definitions.—(1) In *this Act*, unless the context indicates otherwise—

“Constitution” means [the Constitution](#) of the Republic of South Africa, 1996 ([Act No. 108 of 1996](#));

[Definition of “[Constitution](#)” substituted by [s. 1 \(b\)](#) of [Act No. 100 of 1997](#).]

[Wording of Sections](#)

“Council of Education Ministers” means the *Council of Education Ministers* established by the National Education Policy Act, 1996 ([Act No. 27 of 1996](#));

“dangerous object” means—

- (a) any explosive material or device;
- (b) any firearm or gas weapon;
- (c) any article, object or instrument that may be employed to cause bodily harm to a person or damage to property, or to render a person temporarily paralysed or unconscious; or
- (d) any object that the *Minister* may, by notice in the *Gazette*, declare to be a dangerous object for the purpose of this Act;

[Definition of “[dangerous object](#)” inserted by [s. 4 \(a\)](#) of [Act No. 31 of 2007](#).]

“education department” means the department established by [section 7 \(2\)](#) of the Public Service Act, 1994 ([Proclamation No. 103 of 1994](#)), which is responsible for education in a *province*;

“educator” means any person, excluding a person who is appointed to exclusively perform extracurricular duties, who teaches, educates or trains other persons or who provides professional educational services, including professional therapy and education psychological services, at a *school*;

[Definition of “[educator](#)” substituted by [s. 6 \(a\)](#) of [Act No. 48 of 1999](#).]

[Wording of Sections](#)

“governing body” means a *governing body* contemplated in [section 16 \(1\)](#);

“grade” means that part of an educational programme which a *learner* may complete in one *school* year, or any other education programme which the *Member of the Executive Council* may deem to be equivalent thereto;

“Head of Department” means the head of an *education department*;

“illegal drug” means—

- (a) any unlawful substance that has a psychological or physiological effect; or
- (b) any substance having such effect that is possessed unlawfully;

[Definition of “[illegal drug](#)” inserted by [s. 4 \(b\)](#) of [Act No. 31 of 2007](#).]

“independent school” means a *school* registered or deemed to be registered in terms of [section 46](#);

“learner” means any person receiving education or obliged to receive education in terms of this Act;

“loan” means any financial obligation based on agreement, which obligation renders a *school* liable for making payment, in one or more instalments, in favour of any person, but does not include the payment of staff appointed by the *governing body* in terms of [section 20 \(4\)](#) or [\(5\)](#);

[Definition of “[loan](#)” inserted by [s. 4 \(a\)](#) of [Act No. 15 of 2011](#).]

“member of staff” means a person employed at a *school*;

“Member of the Executive Council” means the *Member of the Executive Council* of a province who is responsible for education in that *province*;

“Minister” means the *Minister* of Basic Education;

[Definition of “[Minister](#)” substituted by [s. 4 \(b\)](#) of [Act No. 15 of 2011](#).]

[Wording of Sections](#)

“no fee threshold” means the level of funding per *learner* contemplated in the *norms and standards* for *school* funding applicable to a *public school* which enables the *Minister* to declare a *school* a no fee *school* in terms of *this Act*;

[Definition of “[no fee threshold](#)” inserted by [s. 1 \(a\)](#) of [Act No. 24 of 2005](#).]

“norms and standards for school funding” means the national norms and standards for the funding of *schools* determined by the *Minister* in terms of [section 35](#);

[Definition of “[norms and standards for school funding](#)” inserted by [s. 1 \(a\)](#) of [Act No. 24 of 2005](#).]

“officer” means an employee of an *education department* appointed in terms of the *Educators Employment Act, 1994* ([Proclamation No. 138 of 1994](#)), or the *Public Service Act, 1994* ([Proclamation No. 103 of 1994](#));

“parent” means—

(a)

the biological or adoptive *parent* or legal guardian of a *learner*;

[[Para. \(a\)](#) substituted by [s. 4 \(c\)](#) of [Act No. 15 of 2011](#).]

[Wording of Sections](#)

(b)

the person legally entitled to custody of a *learner*; or

(c)

the person who undertakes to fulfil the obligations of a person referred to in [paragraphs \(a\)](#) and [\(b\)](#) towards the *learner’s* education at *school*;

“principal” means an *educator* appointed or acting as the head of a *school*;

“province” means a *province* established by [section 124](#) of [the Constitution](#);

“provincial legislature” means a *provincial legislature* contemplated in [section 125](#) of [the Constitution](#);

“public school” means a *school* contemplated in [Chapter 3](#);

“Registrar of deeds” means the *registrar of deeds* referred to in [section 2](#) of the *Deeds Registries Act, 1937* ([Act No. 47 of 1937](#));

[Definition of “Registrar of deeds” inserted by [s. 1 \(a\)](#) of [Act No. 100 of 1997](#).]

“school” means a *public school* or an independent *school* which enrolls *learners* in one or more *grades* from *grade R* (Reception) to *grade twelve*;

[Definition of “[school](#)” substituted by [s. 1 \(c\)](#) of [Act No. 100 of 1997](#) and by [s. 6 \(b\)](#) of [Act No. 48 of 1999](#).]

Wording of Sections

“school activity” means any official educational, cultural, recreational or social activity of the *school* within or outside the *school* premises;

[Definition of “[school activity](#)” inserted by [s. 4 \(c\)](#) of [Act No. 31 of 2007](#).]

“school fees” means *school fees* contemplated in [section 39](#) and includes any form of contribution of a monetary nature made or paid by a person or body in relation to the attendance or participation by a *learner* in any programme of a *public school*;

[Definition of “[school fees](#)” inserted by [s. 1 \(b\)](#) of [Act No. 24 of 2005](#).]

“this Act” means *this Act* and all regulations promulgated under *this Act*.

[[Sub-s. \(1\)](#), previously [s. 1](#), amended by [s. 1](#) of [Act No. 50 of 2002](#).]

Wording of Sections

(2) Footnotes appearing in *this Act* must not be used in the interpretation of any provision of *this Act*.

[[Sub-s. \(2\)](#) added by [s. 1](#) of [Act No. 50 of 2002](#).]

Wording of Sections	x
def: Constitution of Act 84 of 1996 prior to amendment by Act 100 of 1997	
Wording of Sections	x
def: educator of Act 84 of 1996 prior to amendment by Act 48 of 1999	
Wording of Sections	x
def: Minister of Act 84 of 1996 prior to amendment by Act 15 of 2011	
Repealed Act	x
P 138 of 1994 has been repealed by s 137(1) of Act 76 of 1998	
Wording of Sections	x
def: parent par(a) of Act 84 of 1996 prior to amendment by Act 15 of 2011	
Wording of Sections	x
def: school of Act 84 of 1996 prior to amendment by Act 100 of 1997 def: school of Act 84 of 1996 prior to amendment by Act 48 of 1999	
Wording of Sections	x
s 1(1), s 1 of Act 84 of 1996 prior to amendment by Act 50 of 2002	

2. Application of Act.—(1) *This Act* applies to *school* education in the Republic of South Africa.

(2) A *Member of the Executive Council* and a *Head of Department* must exercise any power conferred upon them by or under *this Act*, after taking full account of the applicable policy determined in terms of the National Education Policy Act, 1996 ([Act No. 27 of 1996](#)).

(3) Nothing in *this Act* prevents a *provincial legislature* from enacting legislation for *school* education in a *province* in accordance with [the Constitution](#) and *this Act*.

[[Sub-s. \(3\)](#) amended by [s. 2](#) of [Act No. 100 of 1997](#).]

Wording of Sections

33A. Prohibition of political activities during school time.—(1) No party-political activities may be conducted at a *school* during *school* time determined by the *governing body* of the *school* in terms of [section 20 \(1\) \(f\)](#).

(2) The party-political activities contemplated in [subsection \(1\)](#) include, but are not limited to—

- (a) campaigning;
- (b) the conducting of rallies;
- (c) the distribution of pamphlets and fliers; and
- (d) the hanging or putting up of posters and banners.

(3) A member of a political party may not, for the purposes of conducting party-political activities, encroach on the *school* time.

(4) A *school* may not allow the display of material of a party-political nature on its premises unless such party-political material is related to the curriculum at the *school*.

[S. 33A inserted by [s. 11](#) of [Act No. 15 of 2011](#).]

CHAPTER 4 FUNDING OF PUBLIC SCHOOLS

34. Responsibility of State.—(1) The State must fund *public schools* from public revenue on an equitable basis in order to ensure the proper exercise of the rights of *learners* to education and the redress of past inequalities in education provision.

(2) The State must, on an annual basis, provide sufficient information to *public schools* regarding the funding referred to in [subsection \(1\)](#) to enable *public schools* to prepare their budgets for the next financial year.

35. Norms and standards for school funding.—(1) Subject to [the Constitution](#) and *this Act*, the *Minister* must determine national quintiles for *public schools* and *national norms and standards for school funding* after consultation with the *Council of Education Ministers* and the Minister of Finance.

(2) The *norms and standards for school funding* contemplated in [subsection \(1\)](#) must—

- (a) set out criteria for the distribution of state funding to all *public schools* in a fair and equitable manner;
- (b) provide for a system in terms of which *learners* at all *public schools* can be placed into quintiles, referred to as national quintiles for *learners*, according to financial means;
- (c) provide for a system in terms of which all *public schools* in the Republic can be placed into quintiles referred to as national quintiles for *public schools*, according to the distribution of *learners* in the national quintiles for *learners*; and
- (d)

determine the procedure in terms of which the *Member of the Executive Council* must apply the criteria contemplated in [paragraph \(a\)](#).

[[S. 35](#) substituted by [s. 3](#) of [Act No. 24 of 2005](#).]

[Wording of Sections](#)

Wording of Sections	✕
s 35 of Act 84 of 1996 prior to amendment by Act 24 of 2005	

36. Responsibility of governing body.—(1) A *governing body* of a *public school* must take all reasonable measures within its means to supplement the resources supplied by the State in order to improve the quality of education provided by the *school* to all *learners* at the *school*.

(2) Despite [subsection \(1\)](#), a *governing body* may not enter into any loan or overdraft agreement so as to supplement the *school* fund, without the written approval of the *Member of the Executive Council*.

[[Sub-s. \(2\)](#) added by [s. 5](#) of [Act No. 57 of 2001](#).]

(3) If a person lends money or grants an overdraft to a *public school* without the written approval of the *Member of the Executive Council*, the State and the *public school* will not be bound by the contract of lending money or an overdraft agreement.

[[S. 36](#) amended by [s. 5](#) of [Act No. 57 of 2001](#). [Sub-s. \(3\)](#) added by [s. 5](#) of [Act No. 57 of 2001](#).]

[Wording of Sections](#)

(4) (a) A *governing body* may, with the approval of the *Member of the Executive Council*—

(i)
lease, burden, convert or alter immovable property of the *school* to provide for *school activities* or to supplement the *school* fund of that *school*; and

(ii)
allow any person to conduct any business on *school* property to supplement the *school* fund.

(b) A *governing body* may not allow any activity on *school* property that is hazardous or disruptive to *learners* or prohibited by *this Act*.

[[Sub-s. \(4\)](#) added by [s. 12](#) of [Act No. 15 of 2011](#).]

(5) For the purposes of [subsection \(4\)](#), “*school* property” means immovable property owned by the State, including property contemplated in [sections 13](#) and [55](#) and any immovable property bought by a *school* from the *school* funds or donations to the *school*.

[[Sub-s. \(5\)](#) added by [s. 12](#) of [Act No. 15 of 2011](#).]

Wording of Sections	✕
s 36 of Act 84 of 1996 prior to amendment by Act 57 of 2001	

37. School funds and assets of public schools.—(1) The *governing body* of a *public school* must establish a *school* fund and Administer it in accordance with directions issued by the *Head of Department*.

(2) Subject to [subsection \(3\)](#), all money received by a *public school* including *school* fees and voluntary contributions must be paid into the *school* fund.

(3) The *governing body* of a *public school* must open and maintain one banking account, but a *governing body* of a *public school* may, with the approval of the *Member of the Executive Council*, invest surplus money in another account.

[[Sub-s. \(3\)](#) substituted by [s. 6 \(a\)](#) of [Act No. 57 of 2001](#).]

Wording of Sections

(4) Money or other goods donated or bequeathed to or received in trust by a *public school* must be applied in accordance with the conditions of such donation, bequest or trust.

(5) All assets acquired by a *public school* on or after the commencement of this Act are the property of the *school*.

(6) The *school* fund, all proceeds thereof and any other assets of the *public school* must be used only for—

- (a) educational purposes, at or in connection with such *school*;
- (b) educational purposes, at or in connection with another *public school*, by agreement with such other *public school* and with the consent of the *Head of Department*;
- (c) the performance of the functions of the *governing body*; or
- (d) another educational purpose agreed between the *governing body* and the *Head of Department*.

(7) (a) Money from the *school* fund of a *public school* may not be paid into a trust or be used to establish a trust.

(b) If a trust was established from a *school* fund of a *public school* or if such money was paid into a trust prior to 1 January 2002, such trust or payment is invalid and the money must be paid back into the *school* fund.

(c) A *governing body* of a *public school* may not collect any money or contributions from parents to circumvent or manipulate the payment of compulsory school fees and to use such money or contributions to establish or fund a trust, and if such money or contributions of parents were paid into a trust prior to 1 January 2002, the trust must pay such money or contributions into the *school* fund.

[Sub-s. (7) inserted by s. 6 (b) of Act No. 57 of 2001.]

Wording of Sections	
s 37(3) of Act 84 of 1996 prior to amendment by Act 57 of 2001	✕

38. Annual budget of public school.—(1) A governing body of a public school must prepare a budget each year according to prescriptions determined by the Member of the Executive Council in a Provincial Gazette, which shows the estimated income and expenditure of the school for the following financial year.

[Sub-s. (1) substituted by s. 7 of Act No. 57 of 2001.]

Wording of Sections

(2) Before a budget referred to in subsection (1) is approved by the *governing body*, it must be presented to a general meeting of *parents* convened on at least 30 days' notice, for consideration and approval by a majority of *parents* present and voting.

(3) The notice contemplated in subsection (2) must also inform the *parents* that the budget will be available for inspection at the *school* at least 14 days prior to the meeting.

[Sub-s. (3) added by s. 7 of Act No. 50 of 2002.]

Wording of Sections	
	✕

[s 38\(1\)](#) of Act 84 of 1996 prior to amendment by [Act 57 of 2001](#)

38A. Prohibition of payment of unauthorised remuneration, or giving of financial benefit or benefit in kind to certain employees.—(1) Subject to [subsection \(2\)](#), a governing body may not pay or give to a state employee employed in terms of the Employment of Educators Act, 1998 ([Act No. 76 of 1998](#)), or the Public Service Act, 1994 ([Proclamation No. 103 of 1994](#)), any unauthorised—

- (a) remuneration;
- (b) other financial benefit; or
- (c) benefit in kind.

(2) A governing body may apply to the employer for approval to pay a state employee any payment contemplated in [subsection \(1\)](#).

(3) Such application must be lodged in writing in the office of the employer and must state—

- (a) full details of the nature and extent of the payment;
- (b) the process and resources that will be used to compensate or remunerate the state employee; and
- (c) the extent of compliance with [section 20 \(5\)](#) to [\(9\)](#).

(4) The governing body must make the application contemplated in [subsection \(2\)](#) at least four months prior to the finalisation of the school's budget.

(5) Despite [subsection \(1\)](#), a governing body may pay travel and subsistence expenses relating to official school activities but such expenses may not be greater than those that would be payable to a public servant in similar circumstances.

(6) An employer must not unreasonably refuse an application contemplated in [subsection \(2\)](#).

(7) In considering the application, the employer must take into account—

- (a) the implications for the employer in terms of the employment contract and labour law;
- (b) whether the service concerned in the application will interfere with the normal service delivery of the employee;
- (c) whether the service concerned in the application has already been paid for by the employer; and
- (d) whether the additional remuneration, other benefits or benefits in kind support the core activities and functions of the school.

(8) The payment contemplated in [subsection \(1\)](#) must be reflected in the school's budget, as presented to the general meeting of parents as contemplated in [section 38 \(2\)](#).

(9) If a governing body pays remuneration or gives any financial benefit or benefit in kind contemplated in [subsection \(1\)](#) to an employee without prior approval of the employer, the amount of

money paid or benefit given must be recovered by the employer on behalf of the school from members of the governing body who took that decision, excluding a member of the governing body who is a minor.

(10) A governing body may appeal to the Member of the Executive Council against—

- (a) the refusal by the employer of an application contemplated in [subsection \(2\)](#); or
- (b) the failure of the employer to provide a decision on an application contemplated in [subsection \(2\)](#) within three months after the lodging of the application in the office of the employer.

[[S. 38A](#) inserted by [s. 2](#) of [Act No. 1 of 2004](#).]

39. School fees at public schools.—(1) Subject to *this Act*, school fees may be determined and charged at a *public school* only if a resolution to do so has been adopted by a majority of *parents* attending the meeting referred to in [section 38 \(2\)](#).

(2) A resolution contemplated in [subsection \(1\)](#) must provide for—

- (a) the amount of *school fees* to be charged;
- (b) equitable criteria and procedures for the total, partial or conditional exemption of *parents* who are unable to pay *school fees*; and
- (c) a *school* budget that reflects the estimated cumulative effect of—

(i)

the established trends of non-payment of *school fees*; and

(ii)

the total, partial or conditional exemptions granted to *parents* in terms of the regulations contemplated in [subsection \(4\)](#).

[[Sub-s. \(2\)](#) substituted by [s. 4 \(a\)](#) of [Act No. 24 of 2005](#).]

[Wording of Sections](#)

(3) The *governing body* must implement a resolution adopted at the meeting contemplated in [subsection \(1\)](#).

(4) The *Minister* must, after consultation with the *Council of Education Ministers* and the Minister of Finance, make regulations regarding the equitable criteria and procedures referred to in [subsection \(2\) \(b\)](#).

(5) No *public school* may charge any registration, administration or other fee, except *school fees* as defined in [section 1](#).

[[Sub-s. \(5\)](#) added by [s. 4 \(b\)](#) of [Act No. 24 of 2005](#).]

(6) A *public school* may not charge a *parent* of a *learner* at that *school* different *school fees* based on curriculum or extramural curriculum within the same *grade*

[[Sub-s. \(6\)](#) added by [s. 4 \(b\)](#) of [Act No. 24 of 2005](#).]

(7) Despite [subsection \(1\)](#), the *Minister* must by notice in the Government Gazette annually determine the national quintiles for *public schools* or part of such quintiles which must be used by the *Member of the Executive Council* to identify *schools* that may not charge *school fees*.

[[Sub-s. \(7\)](#) added by [s. 4 \(b\)](#) of [Act No. 24 of 2005](#).]

(8) The *Minister* may make a determination in terms of [subsection \(7\)](#) only if sufficient funding, not less than the *no fee threshold*, has been secured to fund *learners* at the *schools* affected by the determination.

[[Sub-s. \(8\)](#) added by [s. 4 \(b\)](#) of [Act No. 24 of 2005](#).]

(9) The *Member of the Executive Council* must identify and draw a list of all the *schools* contemplated in [subsection \(7\)](#) within his or her *province*.

[[Sub-s. \(9\)](#) added by [s. 4 \(b\)](#) of [Act No. 24 of 2005](#).]

(10) The *Minister* must—

- (a) consider the list of *schools* identified in terms of [subsection \(9\)](#);
- (b) compare the list with the determination contemplated in [section 35 \(1\)](#); and
- (c) publish the list per *province*, in the Government Gazette if it complies with the determination.

[[Sub-s. \(10\)](#) added by [s. 4 \(b\)](#) of [Act No. 24 of 2005](#).]

(11) The *schools* contemplated in [subsection \(7\)](#) may, despite that subsection, charge *school fees* if they receive less than the *no fee threshold* from the provincial *education department*.

[[Sub-s. \(11\)](#) added by [s. 4 \(b\)](#) of [Act No. 24 of 2005](#).]

(12) The right of the *school* to charge *school fees* in terms of [subsection \(11\)](#) is limited to an amount equal to the sum obtained if the actual amount received from the State is deducted from the *no fee threshold*.

[[Sub-s. \(12\)](#) added by [s. 4 \(b\)](#) of [Act No. 24 of 2005](#).]

(13) Subject to [subsection \(7\)](#), the *Member of the Executive Council* may, after consultation with the relevant *governing bodies*, annually by notice in the Provincial Gazette identify additional *public schools* within his or her province that, although they have not been included in the list of *schools* contemplated in [subsection \(10\) \(c\)](#), may not charge *school fees*.

[[Sub-s. \(13\)](#) added by [s. 13](#) of [Act No. 15 of 2011](#).]

(14) The *schools* contemplated in [subsection \(13\)](#) must be the *schools* that have been ranked as the poorest *schools* in that province falling outside the list of *schools* contemplated in [subsection \(10\) \(c\)](#).

[[Sub-s. \(14\)](#) added by [s. 13](#) of [Act No. 15 of 2011](#).]

(15) The *Member of the Executive Council* may act in terms of [subsection \(13\)](#) only if sufficient funding has been secured in the province to fund *learners* in the *schools* affected by such action.

[[Sub-s. \(15\)](#) added by [s. 13](#) of [Act No. 15 of 2011](#).]

(16) For the purposes of [subsection \(15\)](#), “sufficient funding” means funding that is not less than the *no fee threshold*.

[[Sub-s. \(16\)](#) added by [s. 13](#) of [Act No. 15 of 2011](#).]

Wording of Sections



[s 39\(2\)](#) of Act 84 of 1996 prior to amendment by [Act 24 of 2005](#)

40. Parent's liability for payment of school fees.—(1) A *parent* is liable to pay the *school fees* determined in terms of [section 39](#) unless or to the extent that he or she has been exempted from payment in terms of *this Act*.

(2) A *parent* may appeal to the *Head of Department* against a decision of a *governing body* regarding the exemption of such *parent* from payment of *school fees*.

(3) In deciding an appeal referred to in [subsection \(2\)](#), the *Head of Department* must follow due process which safeguards the interests of the *parent* and the *governing body*.

41. Enforcement of payment of school fees.—(1) A *public school* may by process of law enforce the payment of *school fees* by *parents* who are liable to pay in terms of [section 40](#).

(2) The exemption from payment of *school fees* must be calculated according to the regulations contemplated in [section 39 \(4\)](#).

(3) The exemption from payment of *school fees* in terms of *this Act* is calculated retrospectively from the date on which the *parent* qualifies for the exemption.

(4) A *public school* may act in terms of [subsection \(1\)](#) only after it has ascertained that—

- (a) the *parent* does not qualify for exemption from payment of *school fees* in terms of *this Act*;
- (b) deductions have been made in terms of regulations contemplated in [section 39 \(4\)](#), for a *parent* who qualifies for partial exemption; and
- (c) the *parent* has completed and signed the form prescribed in the regulations contemplated in [section 39 \(4\)](#).

(5) Despite [subsection \(4\)](#), a *public school* may act in terms of [subsection \(1\)](#) if—

- (a) that *school* can provide proof of a written notification to the *parent* delivered by hand or registered post that the *parent* has failed to apply for exemption contemplated in [section 39](#); and
- (b) despite the notice contemplated in [paragraph \(a\)](#), the *parent* fails to pay the *school fees* after a period of three months from the date of notification.

(6) A *public school* may not attach the dwelling in which a *parent* resides.

(7) A *learner* may not be deprived of his or her right to participate in all aspects of the programme of a *public school* despite the non-payment of *school fees* by his or her *parent* and may not be victimised in any manner, including but not limited to the following conduct:

- (a) Suspension from classes;
- (b) verbal or non-verbal abuse;
- (c) denial of access to—
 - (i) cultural, sporting or social activities of the *school*; or
 - (ii) the nutrition programme of the school for those *learners* who qualify in terms of the applicable policy; or
- (d) denial of a *school* report or transfer certificate.

[S. 41 substituted by s. (5) of [Act No. 24 of 2005](#).]

[Wording of Sections](#)

Wording of Sections	
s 41 of Act 84 of 1996 prior to amendment by Act 24 of 2005	

42. Financial records and statements of public schools.—The *governing body* of a *public school* must—

- (a) keep records of funds received and spent by the *public school* and of its assets, liabilities and financial transactions; and
- (b) as soon as practicable, but not later than three months after the end of each financial year, draw up annual financial statements in accordance with the guidelines determined by the *Member of the Executive Council*.

43. Audit or examination of financial records and statements.—(1) The *governing body* of a *public school* must appoint a person registered as an auditor in terms of the Auditing Profession Act, 2005 ([Act No. 26 of 2005](#)), to audit the records and financial statements referred to in [section 42](#).

[[Sub-s. \(1\)](#) substituted by [s. 10](#) of [Act No. 31 of 2007](#).]

[Wording of Sections](#)

(2) If the audit referred to in subsection (1) is not reasonably practicable, the *governing body* of a *public school* must appoint a person to examine and report on the records and financial statements referred to in [section 42](#), who—

- (a) is qualified to perform the duties of an accounting officer in terms of [section 60](#) of the Close Corporations Act, 1984 ([Act No. 69 of 1984](#)); or
- (b) is approved by the *Member of the Executive Council* for this purpose.

(3) No person who has a financial interest in the affairs of the *public school* may be appointed under this section.

(4) If the *Member of the Executive Council* deems it necessary, he or she may request the Auditor-General to undertake an audit of the records and financial statements of a *public school*.

(5) A *governing body* must submit to the *Head of Department*, within six months after the end of each financial year, a copy of the annual financial statements, audited or examined in terms of this section.

(6) At the request of an interested person, the *governing body* must make the records referred to in [section 42](#), and the audited or examined financial statements referred to in this section, available for inspection.

Wording of Sections	
s 43(1) of Act 84 of 1996 prior to amendment by Act 31 of 2007	

44. Financial year of public school.—The financial year of a *public school* commences on the first day of January and ends on the last day of December of each year.

GOVERNMENT NOTICE

DEPARTMENT OF EDUCATION

No. 1089

17 October 2008

SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 of 1996)

NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING (NNSF)

I, Grace Naledi Mandisa Pandor, Minister of Education:

In terms of Paragraph 112 of the NNSF, hereby, updates the national poverty distribution table (paragraph 111 of the NNSF) after consultation with the Minister of Finance. The table produced below therefore should be used as the basis for the national poverty targeting and replaces the table on page 33 of NNSF 2006.

Table 1:

National poverty distribution table						
National quintiles						
	1 (poorest)	2	3	4	5 (least poor)	Total
Eastern Cape	28.2	21.7	19.7	17.4	13.1	100%
Free State	19.7	22.0	18.9	21.8	17.6	100%
Gauteng	12.7	15.4	19.3	23.0	29.6	100%
KwaZulu-Natal	20.9	22.2	21.1	20.2	15.4	100%
Limpopo	28.1	24.7	23.9	15.6	7.6	100%
Mpumalanga	25.3	22.4	21.0	18.7	12.7	100%
Northern Cape	22.3	22.6	21.6	20.6	12.9	100%
North West	23.5	23.4	18.7	17.0	17.3	100%
Western Cape	9.5	13.6	16.9	22.1	37.9	100%
South Africa	20%	20%	20%	20%	20%	100%

In terms of Paragraph 110 of the NNSF, also hereby, updates the national targets table (Paragraph 109) on page 31 of NNSF 2006 to include 2011 target amounts.

Table 2:

National table of targets for the school allocation (2009-2011)

	A	2009		2010		2011	
		B	C	B	C	B	C
NQ1	30.0	R 807	100%	R 855	100%	R 916	100%
NQ2	27.5	R 740	100%	R 784	100%	R 840	100%
NQ3	22.5	R 605	100%	R 641	100%	R 687	100%
NQ4	15.0	R 404	67%	R 428	67%	R 459	67%
NQ5	5.0	R 134	22%	R 147	22%	R 158	22%
Overall	100.0	R 538	89%	R 571	89%	R 612	89%
No fee threshold		R 605		R 641		R 687	

Source: Amended National Norms and Standards for School Funding
[2011 figures inflation adjusted – Treasury: National Budget Review CPI-X inflation]

In terms of Section 39(7) of the South African Schools Act, 1996 (Act No. 84 of 1996), hereby, declares all learners in quintile 1 and quintile 2 (40% of the public-school learners

nationally) to be in no fee schools for 2009. A breakdown of the 40% of learners in national quintiles 1 and 2 for 2009 is given below, per province:

Table 3:

Province	National Quintiles 1 and 2		
	% of provincial learners in National Q1	% of provincial learners in National Q2	% of provincial learners in National Q1&Q2 (proposed learners in no-fee schools)
Eastern Cape	28.2	21.7	49.8
Free State	19.7	22.0	41.7
Gauteng	12.7	15.4	28.1
KwaZulu-Natal	20.9	22.2	43.1
Limpopo	28.1	24.7	52.8
Mpumalanga	25.3	22.4	47.7
Northern Cape	22.3	22.6	44.9
North West	23.5	23.4	46.9
Western Cape	9.5	13.6	23.1
South Africa	20	20	40

The Members of the Executive Councils (MECs) responsible for education in provinces have identified the specific schools in the province that may not charge school fees [that will be no-fee schools as contemplated in section 39(9) of the South African Schools Act, 1996] in 2009.

After having considered the lists of schools identified by the MECs responsible for education in each province and having compared those lists with the requirements set out in the amended National Norms and Standards for School Funding:

I also hereby, in accordance with section 39(10) of the South African Schools Act, 1996 (Act No. 84 of 1996), publish the list set out in the **Schedule**, per province, of schools that may not charge school fees.

The schools identified in the **Schedule** may not charge school fees for the 2009 school year, subject to the provisions of section 39 of the South African Schools Act, 1996.

The percentage of learners to be in quintiles that will be for no fee schools taking both my determination and voluntary no fee schools of Eastern Cape, Free State, Gauteng, Limpopo, Northern Cape, and Western Cape PEDs is given below, per province.

Table 4:

Province	<u>Gazetted</u> national % of learners in no fee schools in Q1 and Q2	<u>(Voluntary)</u> Provincial % of learners in no fee schools in Q3	Provincial % of no fee learners in Q1 to Q3
Eastern Cape	49.8	18.7	68.5
Free State	41.7	21.1	62.8
Gauteng	28.1	25.6	53.7
KwaZulu-Natal	43.2	0	43.2
Limpopo	52.9	24.8	77.7
Mpumalanga	47.7	*	*47.7
Northern Cape#	44.9	20.8	65.7

North West	46.9	*	*46.9
Western Cape	23.1	23.3	46.4
South Africa:	40.0	14.9	57.0

* Province is in process of finalising the lists of voluntary no fee schools as at the date of publication.

The table below shows a comparison of provincial percentages against gazetted national percentages of learners in no fee schools for 2009 nationally:

Table 5:

Province	Gazetted national % of learners in no fee schools in Q1 and Q2	Provincial % of learners in no fee schools in Q1 and Q2	Gazetted national % of learners in Q1 to Q3	Provincial % of Q1 and Q2 learners plus voluntary Q3 learners who can be funded without leaving them disadvantaged if declared no fee
Eastern Cape	49.8	54.3	77.4	73.0
Free State	41.7	45.7	65.8	66.8
Gauteng	28.1	23.3	49.3	48.9
KwaZulu-Natal	43.2	43.0	68.6	43.0
Limpopo	52.9	58.7	81.2	83.5
Mpumalanga	47.7	40.7	66.6	*40.7
Northern Cape	44.9	54.8	65.6	75.6
North West	46.9	37.6	68.4	*37.6
Western Cape	23.1	14.9	37.7	38.2
South Africa:	40.0	41.5	60.0	56.4

* Province is in process of finalising the lists of voluntary no fee schools as at the date of publication.

A budget bid has been made to ensure that an allocation of above the threshold level is made to quintile 3 schools. If this materializes then I will make a further determination or the relevant provincial MECs will undertake an agreement with their quintile 3 schools not to charge school fees in lieu of additional allocations.

Information provided by Eastern Cape, Free State, Gauteng, Limpopo, Northern Cape; and Western Cape PEDs is that they will be able to extend the no fee status to quintile 3 learners. A breakdown of the percentage of learners in no fee schools in quintile 3 for 2009 in these provinces is given below:

Table 6:

Province	Provincial % of learners in no fee schools in Q3
Eastern Cape	18.7
Free State	21.1
Gauteng	25.6
Limpopo	24.8
Northern Cape	20.8
Western Cape	23.3
South Africa:	14.9

Specific questions regarding schools identified in the **Schedule** should be addressed to the MECs for Education in the provinces, at the following addresses:

Mr DM Qwase MEC: Education Eastern Cape Private Bag X0032 BISHO 5605 Tel. 040 608 4202/3 Fax 040 608 4247	Mr MC Mokitlane MEC: Education Free State PO Box 521 BLOEMFONTEIN 9300 Tel. 051 404 8411 Fax 051 404 8295	Mr Y Gabru MEC: Education Western Cape Private Bag X9161 CAPE TOWN 8000 Tel. 021 467 2523/6 Fax 021 425 5689
Mr GA Lucas MEC: Education Northern Cape Private Bag X5023 KIMBERLEY 8300 Tel. 053 830 7160 Fax 053 830 7177	The Reverend OJ Tselapedi MEC: Education North West Private Bag X2044 MMABATHO 2735 Tel. 018 387 3700/3748 Fax 018 384 5016	Dr PA Motsoaledi MEC: Education Limpopo Private Bag X9489 POLOKWANE 0700 Tel. 015 297 0013 Fax: 015 297 0885
Mrs EM Coleman MEC: Education Mpumalanga PO Box 3011 POLOKWANE 1200 Tel. 013 766 5555 Fax 013 766 5587 or 5590	Mrs A Motshekga MEC: Education Gauteng PO Box 7710 JOHANNESBURG 2000 Tel. 011 355 0909 Fax 011 355 0542	Mrs I Cronje MEC: Education KwaZulu-Natal Private Bag X9044 PIETERMARITZBURG 3200 Tel. 033 355 2450 Fax 033 394 0893

The list of schools will be available on the Department of Education's website, www.education.gov.za, under "Current News".

G. N. M. Pandor

GNM Pandor, MP
Minister of Education

Date: 02-10-2008
(034S0380)

SCHEDULE:**LISTS OF NO FEE SCHOOLS IN PEDS FOR 2009****ANNEXURES:**

- A. EASTERN CAPE
- B. FREE STATE
- C. GAUTENG
- D. KWAZULU-NATAL
- E. LIMPOPO
- F. MPUMALANGA
- G. NORTHERN CAPE
- H. NORTH WEST
- I. WESTERN CAPE

GOVERNMENT NOTICE

DEPARTMENT OF EDUCATION

No. 1135

3 December 2009

SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO. 84 OF 1996)

AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING

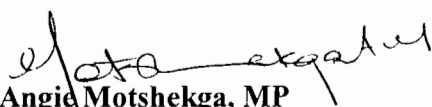
I, Angie Motshekga, Minister of Basic Education, in terms of section 35 and 39 of the South African Schools Act, 1996 (Act 84 of 1996), after consultation with the Minister of Finance and the Council of Education Ministers, hereby publish amendments to the National Norms and Standards for School Funding. The National Norms and Standards for School Funding were published in Government Notice No. 890, Government Gazette No. 29179 of 31 August 2006, corrected by Government Notice No. 1282, Government Gazette No. 29473 of 14 December 2006, amended by Government Notice No. 26, Government Gazette No. 30679 of 18 January 2008 and further amended by Government Notice No. 1089, Government Gazette No. 31498 of 17 October 2008.

The National Norms and Standards for School Funding are hereby amended by -

- (a) the insertion after paragraph 109 on page 31 of the National Norms and Standards for School Funding, Government Gazette No. 29179 of 31 August 2006; and
- (b) the replacement of Table 2 "National table of targets for school allocation (2009-2011)" as published in Government Gazette No. 31498 of 17 October 2008.

The amendments are contained in the Schedule below.

The effective date for implementation of this amendment will be 1 January 2010.


Angie Motshekga, MP
Minister of Basic Education
Date: 24 November 2009

SCHEDULE

The National Norms and Standards for School Funding are hereby amended by -

- (a) the insertion after paragraph 109 on page 31 of the National Norms and Standards for School Funding, Government Gazette No. 29179 of 31 August 2006 of the following:

"109A. FUNDING OF SMALL SCHOOLS

PEDs to top-up funding to small schools* of not less than the national fixed amount of R21 000 (for 2010) as indicated in table 2 below. The top-up funding takes into account the total per learner allocation to a small school. The PED may provide more than the national fixed amount if its budget

allows. Where a small school is located on private property it is recommended that the PED provides additional funding for lease or rental of the property.” and

- (b) the replacement of the table “National table of targets for school allocation (2010-2012)” as published in Government Notice No. 1052, Government Gazette No. 32683 of 6 November 2009 of the following:

“Table 2

National table of targets for the school allocation (2010-2012)

	A	2010		2011		2012	
		B	C	B	C	B	C
NQ1	30.0	R 855	100%	R 901	100%	R 943	100%
NQ2	27.5	R 784	100%	R 826	100%	R 865	100%
NQ3	22.5	R 641	100%	R 675	100%	R 707	100%
NQ4	15.0	R 428	67%	R 451	67%	R 472	67%
NQ5	5.0	R 147	22%	R 155	22%	R 162	22%
Overall	100.0	R 571	89%	R 602	89%	R 630	89%
No fee threshold		R784		R 826		R 865	
Small schools: National fixed amount		R21 000		R 22 113		R 23 152	

*Source: Amended National Norms and Standards for School Funding
[2011 and 2012 figures inflation adjusted – CPIX inflation - National Treasury: Budget Review]*

- * A small school is defined as a school with a total allocation of less than R21 000 per annum (for 2010) based on its learner enrolment and allocation per learner. This applies irrespective of the national quintile of a school.”

GOVERNMENT NOTICE

DEPARTMENT OF BASIC EDUCATION

No. 1017**5 November 2010****SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 of 1996)****AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING**

I, Angelina Matsie Motshekga, Minister of Basic Education, in terms of the sections 35 and 39 of the South African Schools Act, 1996, (Act 84 of 1996) and paragraph 110 of the National Norms and Standards for School Funding (NNSSF), after consultation with the Minister of Finance and the Council of Education Ministers, hereby publish amendments to the NNSSF. The NNSSF were published in Government Notice No. 890, Government Gazette No. 29179 of 31 August 2006, corrected by Government Notice No. 1282, Government Gazette No. 29473 of 14 December 2006, amended by Government Notice No. 26, Government Gazette No. 30679 of 18 January 2006 and further amended by Government Notice No. 1089, Government Gazette No. 31498 of 17 October 2008, Government Notice No. 1387, Government Gazette No. 31574 of 4 November 2008, Government Notice No. 78, Government Gazette No. 31848 of 30 January 2009, Government Notice No. 1052, Government Gazette No. 32683 of 6 November 2009, Government Notice No. 1135, Government Gazette No. 32772 of 3 December 2009 and Government Notice No. 1179, Government Gazette No. 32804 of 11 December 2009.

The NNSSF are hereby amended by updating the National Targets Table (Par. 109 of NNSSF) to include 2012 and 2013 indicative target amounts.

The amendment are contained in the Schedule. The effective date for implementation of this amendment will be 1 January 2011.



MRS ANGIE MOTSHEKGA, MP
Minister of Basic Education
Date: 19 October 2010

SCHEDULE

The National Targets Table published in Government Notice No. 1052, Government Gazette No. 32683 of 06 November 2009 is hereby updated below. The no fee threshold will be R829 in 2011:

National table of targets for the school allocation (2011 – 2013)

	2011	2012*	2013*
NQ 1	R 905	R 960	R 1,016
NQ2	R 829	R 880	R 932
NQ3	R 678	R 720	R 762
NQ4	R 453	R 480	R 509
NQ5	R 156	R 165	R 175
Overall	R 604	R 633	R 679
No fee threshold	R 829	R 880	R 932
Small schools: National fixed amount	R 22,218	R 23,573	R 24,964

* Indicative – CPI inflation rate adjusted

[2012 and 2013 figures inflation adjusted – CPI inflation - National Treasury: Budget Review]

No new data is available to update the national poverty distribution table (Par. 112) of the National Norms and Standards for School Funding. The table which was published in the Government Gazette No 32683 of 6 November 2009, reproduced below, therefore remains the basis for the national poverty targeting for 2011:

National poverty distribution table

National quintiles						
	1 (poorest)	2	3	4	5 (least poor)	Total
Eastern Cape	28.2	21.7	19.7	17.4	13.1	100%
Free State	19.7	22.0	18.9	21.8	17.6	100%
Gauteng	12.7	15.4	19.3	23.0	29.6	100%
KwaZulu-Natal	20.9	22.2	21.1	20.2	15.4	100%
Limpopo	28.1	24.7	23.9	15.6	7.6	100%
Mpumalanga	25.3	22.4	21.0	18.7	12.7	100%
Northern Cape	22.3	22.6	21.6	20.6	12.9	100%
North West	23.5	23.4	18.7	17.0	17.3	100%
Western Cape	9.5	13.6	16.9	22.1	37.9	100%
South Africa	20%	20%	20%	20%	20%	100%

In terms of section 39(7) of the South African Schools Act, I hereby determine all learners in quintiles 1 to 3 (60% of the public school learners nationally) to be in no fee schools for 2011.

If funds are available, the PED could offer Q4 and Q5 schools no fee status at the threshold level of R829 voluntarily. In declaring these fee charging schools as no fee schools, the PED needs to inform all these schools that they will be declared no fee schools from 1 January 2011.

(034s0486GovGaz)

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
 Publications: Tel: (012) 334-4508, 334-4509, 334-4510
 Advertisements: Tel: (012) 334-4673, 334-4674, 334-4504
 Subscriptions: Tel: (012) 334-4735, 334-4736, 334-4737
 Cape Town Branch: Tel: (021) 465-7531

GOVERNMENT NOTICE

DEPARTMENT OF BASIC EDUCATION

No. 992

2 December 2011

SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 of 1996)

AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING

I, Angelina Matsie Motshekga, Minister of Basic Education, in terms of section 35 read with section 39(7) of the South African Schools Act, 1996, (Act 84 of 1996) and paragraph 110 of the National Norms and Standards for School Funding (NNSSF), after consultation with the Minister of Finance and the Council of Education Ministers, hereby publish amendments to the NNSSF. The NNSSF were published in Government Notice No. 890, Government Gazette No. 29179 of 31 August 2006, corrected by Government Notice No. 1282, Government Gazette No. 29473 of 14 December 2006, amended by Government Notice No. 26, Government Gazette No. 30679 of 18 January 2006 and further amended by Government Notice No. 1089, Government Gazette No. 31498 of 17 October 2008, Government Notice No. 1387, Government Gazette No. 31574 of 4 November 2008, Government Notice No. 78, Government Gazette No. 31848 of 30 January 2009, Government Notice No. 1052, Government Gazette No. 32683 of 6 November 2009, Government Notice No. 1135, Government Gazette No. 32772 of 3 December 2009; Government Notice No. 1179, Government Gazette No. 32804 of 11 December 2009; Government Notice No. 1017, Government Gazette No. 33723 of 05 November 2010, Government Notice No. 47, Government Gazette No. 33971 of 28 January 2011 and Government Notice No. 48, Government Gazette No. 33973 of 31 January 2011.

The NNSSF are hereby amended by updating the National Targets Table (Par. 109 of NNSSF) to include 2013 and 2014 indicative target amounts.

The amendment is contained in the Schedule. The effective date for implementation of this amendment will be 1 January 2012.



MRS ANGIE MOTSHEKGA, MP
Minister of Basic Education
Date: 12-11-2011

(034s0534GovGaz)

SCHEDULE

The National Targets Table published in Government Notice No. 1017, Government Gazette No. 33723 of 05 November 2010 is hereby updated below. The no fee threshold will be R880 in 2012:

National table of targets for the school allocation (2012 – 2014)

	2012	2013*	2014*
NQ1	R 960	R 1,010	R 1,065
NQ2	R 880	R 926	R 977
NQ3	R 880	R 926	R 977
NQ4	R 480	R 505	R 533
NQ5	R 165	R 174	R 183
Overall	R 633	R 665	R 747
No fee threshold	R 880	R 926	R 977
Small schools:			
National fixed amount	R 22,218	R 23,373	R 24,752

* Indicative – CPI inflation rate adjusted

[2013 and 2014 figures inflation adjusted – CPI inflation - National Treasury: Budget Review]

No new data is available to update the national poverty distribution table (Par. 112) of the National Norms and Standards for School Funding. The table which was published in the Government Gazette No 32683 of 6 November 2009, reproduced below, therefore remains the basis for the national poverty targeting for 2012:

National poverty distribution table						
National quintiles						
	1 (poorest)	2	3	4	5 (least poor)	Total
EC	28.2	21.7	19.7	17.4	13.1	100%
FS	19.7	22.0	18.9	21.8	17.6	100%
GT	12.7	15.4	19.3	23.0	29.6	100%
KZN	20.9	22.2	21.1	20.2	15.4	100%
LIM	28.1	24.7	23.9	15.6	7.6	100%
MP	25.3	22.4	21.0	18.7	12.7	100%
NC	22.3	22.6	21.6	20.6	12.9	100%
NW	23.5	23.4	18.7	17.0	17.3	100%
WC	9.5	13.6	16.9	22.1	37.9	100%
South Africa	20%	20%	20%	20%	20%	100%

In terms of section 39(7) of the South African Schools Act, I hereby determine all learners in quintiles 1 to 3 (60% of the public school learners nationally) to be in no fee schools for 2012.

If funds are available, the PED may offer Q4 and Q5 schools no fee status at the threshold level of R880 voluntarily. In declaring these fee charging schools as no fee schools, the PED needs to ensure all these schools are informed that they will be declared no fee schools from 1 January 2012. PEDs also need to ensure that these schools have informed parents of the change.

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
 Publications: Tel: (012) 334-4508, 334-4509, 334-4510
 Advertisements: Tel: (012) 334-4673, 334-4674, 334-4504
 Subscriptions: Tel: (012) 334-4735, 334-4736, 334-4737
 Cape Town Branch: Tel: (021) 465-7531

GOVERNMENT NOTICE

DEPARTMENT OF BASIC EDUCATION

No. 166

08-03-2013

SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 of 1996)

AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING

I, Angelina Matsie Motshekga, Minister of Basic Education, in terms of section 35 read with section 39(7) of the South African Schools Act, 1996, (Act 84 of 1996) and with paragraphs 110 and 112 of the National Norms and Standards for School Funding (NNSSF), after consultation with the Minister of Finance and the Council of Education Ministers, hereby publish amendments to the NNSSF. The NNSSF were published in Government Notice No. 890, Government Gazette No. 29179 of 31 August 2006.

The NNSSF are hereby amended by updating the:

1. National Targets Table (Par. 109 of the NNSSF) to include 2014 and 2015 indicative target amounts; and the
2. National Poverty Distribution Table (Par. 111 of the NNSSF)

The amendment is contained in the Schedule. The effective date for implementation of this amendment will be 1 January 2013.


MRS ANGIE MOTSHEKGA, MP
Minister of Basic Education
Date: 17 02 2013

SCHEDULE

In terms of Paragraph 110 of the NNSSF, the National Targets Table published in Government Notice No. 558, Government Gazette No. 34803 of 2 December 2011 is hereby updated to include 2015 target amounts. The no fee threshold will be R926 in 2013:

	2013	2014*	2015*
NQ1	R 1,010	R 1,059	R 1,108
NQ2	R 1,010	R 1,059	R 1,108
NQ3	R 1,010	R 1,059	R 1,108
NQ4	R 505	R 530	R 554
NQ5	R 174	R 183	R 191
Overall	R 742	R 778	R 814
No fee threshold	R 926	R 1,059	R 1,108
Small schools: National fixed amount	R 23,373	R 24,519	R 25,646

* Indicative – CPI inflation rate adjusted

[2014 and 2015 figures inflation adjusted – CPI inflation - National Treasury: Budget Review]

In terms of Paragraph 112 of the NNSSF, the National Poverty Distribution Table (Paragraph 111 of the NNSSF) published in Government Gazette No 32683 of 6 November 2009, is hereby updated and should be used as the basis for the national poverty targeting in 2013:

National Poverty Distribution Table						
%	Quintiles					Total
	1 poorest	2	3	4	5	
EC	27.3	24.7	19.6	17	11.4	100%
FS	20.5	20.9	22.4	20.8	15.4	100%
GP	14.1	14.7	17.9	21.9	31.4	100%
KZN	22.1	23.2	20.2	18.7	15.8	100%
LP	28.2	24.6	24.2	14.9	8	100%
MP	23.1	24.1	21.5	17.7	13.5	100%
NC	21.5	19.3	20.7	21.4	17.1	100%
NW	25.6	22.3	20.8	17.6	13.7	100%
WC	8.6	13.3	18.4	28	31.7	100%
SA	20	20	20	20	20	100%

In terms of section 39(7) of the South African Schools Act, I hereby determine all learners in quintiles 1 to 3 (60% of the public school learners nationally) to be in no fee schools for 2013.

If funds are available, the PED may offer Q4 and Q5 schools no fee status at least at the threshold level of R960 voluntarily. In declaring these fee charging schools as no fee schools, the PED needs to ensure all these schools are informed that they will be declared no fee schools from 1 January 2013. PEDs also need to ensure that these schools have informed parents of the change.

GOVERNMENT NOTICE

DEPARTMENT OF BASIC EDUCATION

No. 12

17 January 2014

SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 of 1996)**AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING**

I, Angelina Matsie Motshekga, Minister of Basic Education, in terms of section 35 read with section 39(7) of the South African Schools Act, 1996, (Act 84 of 1996) and with paragraphs 110 and 112 of the National Norms and Standards for School Funding (NNSF), after consultation with the Minister of Finance and the Council of Education Ministers, hereby publish amendments to the NNSF. The NNSF were published in Government Notice No. 890, Government Gazette No. 29179 of 31 August 2006.

The NNSF are hereby amended by updating the:

1. National Targets Table (Par. 109 of the NNSF) to include 2015 and 2016 indicative target amounts; and the
2. National Poverty Distribution Table (Par. 111 of the NNSF)

The amendment is contained in the Schedule. The effective date for implementation of this amendment will be 1 January 2014.


MRS ANGIE MOTSHEKGA, MP
Minister of Basic Education
Date: 18 December 2013

(N&S-49GovGaz)

SCHEDULE

In terms of Paragraph 110 of the NNSSF, the National Targets Table published in Government Notice No. 166, Government Gazette No. 36222 of 8 March 2013 is hereby updated to include 2016 target amounts. The no fee threshold will be R1,059 in 2014:

National table of targets for the school allocation (2014 – 2016)

	2014	2015*	2016*
NQ1	R 1,059	R 1,116	R 1,175
NQ2	R 1,059	R 1,116	R 1,175
NQ3	R 1,059	R 1,116	R 1,175
NQ4	R 530	R 559	R 588
NQ5	R 183	R 193	R 203
No fee threshold	R 1,059	R 1,116	R 1,175
Small schools: National fixed amount	R 24,519	R 25,843	R 27,213

* 2015 and 2016 figures inflation adjusted – CPI inflation rate adjusted

No new data is available to update the national poverty distribution table (Paragraph 111 of the NNSSF) In terms of Paragraph 112 of the NNSSF The table which was published in Government Gazette No 36222 of 8 March 2013, therefore remains the basis for the national poverty targeting in 2014:

National Poverty Distribution Table						
%	Quintiles					Total
	1 poorest	2	3	4	5	
EC	27.3	24.7	19.6	17	11.4	100%
FS	20.5	20.9	22.4	20.8	15.4	100%
GP	14.1	14.7	17.9	21.9	31.4	100%
KZN	22.1	23.2	20.2	18.7	15.8	100%
LP	28.2	24.6	24.2	14.9	8	100%
MP	23.1	24.1	21.5	17.7	13.5	100%
NC	21.5	19.3	20.7	21.4	17.1	100%
NW	25.6	22.3	20.8	17.6	13.7	100%
WC	8.6	13.3	18.4	28	31.7	100%
SA	20	20	20	20	20	100%

In terms of section 39(7) of the South African Schools Act, I hereby determine all learners in quintiles 1 to 3 (60% of the public school learners nationally) to be in no fee schools for 2014.

If funds are available, the PED may offer Q4 and Q5 schools no fee status at least at the threshold level of R 1,059 voluntarily. In declaring these fee charging schools as no fee schools, the PED needs to ensure all these schools are informed that they will be declared no fee schools from 1 January 2014. PEDs also need to ensure that these schools have informed parents of the change.

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
 Publications: Tel: (012) 334-4508, 334-4509, 334-4510
 Advertisements: Tel: (012) 334-4673, 334-4674, 334-4504
 Subscriptions: Tel: (012) 334-4735, 334-4736, 334-4737
 Cape Town Branch: Tel: (021) 465-7531

GOVERNMENT NOTICE

DEPARTMENT OF BASIC EDUCATION

No. 17

16 January 2015

SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 of 1996)

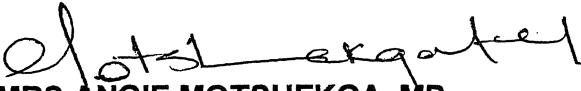
AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING

I, Angelina Matsie Motshekga, Minister of Basic Education, in terms of section 35 read with section 39(7) of the South African Schools Act, 1996, (Act 84 of 1996) and with paragraphs 110 and 112 of the National Norms and Standards for School Funding (NNSSF), after consultation with the Minister of Finance and the Council of Education Ministers, hereby publish amendments to the NNSSF. The NNSSF were published in Government Notice No. 890, Government Gazette No. 29179 of 31 August 2006.

The NNSSF are hereby amended by updating the:

1. National Targets Table (Par. 109 of the NNSSF) to include 2016 and 2017 indicative target amounts; and the
2. National Poverty Distribution Table (Par. 111 of the NNSSF).

The amendment is contained in the Schedule. The effective date for implementation of this amendment will be 1 January 2015.



MRS ANGIE MOTSHEKGA, MP
Minister of Basic Education
Date: 29.12.2014

(N&S-49GovGaz)

SCHEDULE

In terms of Paragraph 110 of the NNSSF, the National Targets Table published in Government Notice No. 12, Government Gazette No. 37230 of 17 January 2014 is hereby updated to include 2017 target amounts. The no fee threshold will be R1,116 in 2015:

National table of targets for the school allocation (2014 – 2016)

	2015	2016*	2017*
NQ1	R 1,116	R 1,177	R 1,242
NQ2	R 1,116	R 1,177	R 1,242
NQ3	R 1,116	R 1,177	R 1,242
NQ4	R 559	R 590	R 622
NQ5	R 193	R 204	R 215
No fee threshold	R 1,116	R 1,177	R 1,242
Small schools: National fixed amount	R 25,843	R 27,264	R 28,764

* 2016 and 2017 figures inflation adjusted – CPI projected inflation rate adjusted

No new data is available to update the national poverty distribution table (Paragraph 111 of the NNSSF) In terms of Paragraph 112 of the NNSSF. The table which was published in Government Gazette No. 37230 of 17 January 2014, therefore remains the basis for the national poverty targeting in 2015:

National Poverty Distribution Table						
%	Quintiles					Total
	1 poorest	2	3	4	5	
EC	27.3	24.7	19.6	17	11.4	100%
FS	20.5	20.9	22.4	20.8	15.4	100%
GP	14.1	14.7	17.9	21.9	31.4	100%
KZN	22.1	23.2	20.2	18.7	15.8	100%
LP	28.2	24.6	24.2	14.9	8	100%
MP	23.1	24.1	21.5	17.7	13.5	100%
NC	21.5	19.3	20.7	21.4	17.1	100%
NW	25.6	22.3	20.8	17.6	13.7	100%
WC	8.6	13.3	18.4	28	31.7	100%
SA	20	20	20	20	20	100%

In terms of section 39(7) of the South African Schools Act, I hereby determine all learners in quintiles 1 to 3 (60% of the public school learners nationally) to be in no fee schools for 2015.

If funds are available, and after taking into consideration the possible funding implications this may have on other poverty related programmes involving no fee schools, the PED may offer Q4 and Q5 schools no fee status at least at the threshold level of R 1,116 voluntarily. In declaring these fee charging schools as no fee schools, the PED needs to ensure all these schools are informed that they will be declared no fee schools from 1 January 2015. PEDs also need to ensure that these schools have informed parents of the change.

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
 Publications: Tel: (012) 748 6052, 748 6053, 748 6058
 Advertisements: Tel: (012) 748 6205, 748 6208, 748 6209, 748 6210, 748 6211
 Subscriptions: Tel: (012) 748 6054, 748 6055, 748 6057

GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF BASIC EDUCATION

NO. 718

10 JUNE 2016

SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 of 1996)**AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING**

I, Angelina Matsie Motshekga, Minister of Basic Education, in terms of section 35 read with section 39(7) of the South African Schools Act, 1996, (Act 84 of 1996) and with paragraphs 110 and 112 of the National Norms and Standards for School Funding (NNSSF), after consultation with the Minister of Finance and the Council of Education Ministers, hereby publish amendments to the NNSSF. The NNSSF were published in Government Notice No. 890, Government Gazette No. 29179 of 31 August 2006.

The NNSSF are hereby amended by updating the:

1. National Targets Table (Par. 109 of the NNSSF) to include 2017 and 2018 indicative target amounts; and the
2. National Poverty Distribution Table (Par. 111 of the NNSSF).

The amendment is contained in the Schedule. The effective date for implementation of this amendment will be 1 January 2016.



MRS AM MOTSHEKGA, MP
Minister of Basic Education
Date: 20 May 2016

SCHEDULE

In terms of Paragraph 110 of the NNSSF, the National Targets Table published in Government Notice No. 17, Government Gazette No. 38397 of 16 January 2015 is hereby updated to include 2018 target amounts. The no fee threshold will be R1,177 in 2016:

National table of targets for the school allocation (2014 – 2016)

	2016	2017*	2018*
NQ1	R 1,177	R 1,243	R 1,313
NQ2	R 1,177	R 1,243	R 1,313
NQ3	R 1,177	R 1,243	R 1,313
NQ4	R 590	R 623	R 658
NQ5	R 204	R 215	R 227
No fee threshold	R 1,177	R 1,243	R 1,313
Small schools: National fixed amount	R 27,264	R 28,791	R 30,403

* 2017 and 2018 figures inflation adjusted – CPI projected inflation rate adjusted

No new data is available to update the national poverty distribution table (Paragraph 111 of the NNSSF) In terms of Paragraph 112 of the NNSSF. The table which was published in Government Gazette No. 38397 of 16 January 2015, therefore remains the basis for the national poverty targeting in 2016:

National Poverty Distribution Table						
%	Quintiles					Total
	1 poorest	2	3	4	5	
EC	27.3	24.7	19.6	17	11.4	100%
FS	20.5	20.9	22.4	20.8	15.4	100%
GP	14.1	14.7	17.9	21.9	31.4	100%
KZN	22.1	23.2	20.2	18.7	15.8	100%
LP	28.2	24.6	24.2	14.9	8	100%
MP	23.1	24.1	21.5	17.7	13.5	100%
NC	21.5	19.3	20.7	21.4	17.1	100%
NW	25.6	22.3	20.8	17.6	13.7	100%
WC	8.6	13.3	18.4	28	31.7	100%
SA	20	20	20	20	20	100%

In terms of section 39(7) of the South African Schools Act, I hereby determine all learners in quintiles 1 to 3 (60% of the public school learners nationally) to be in no fee schools for 2016.

If funds are available, and after taking into consideration the possible funding implications this may have on other poverty related programmes involving no fee schools, the PED may offer Q4 and Q5 schools no fee status at least at the threshold level of R 1,177 voluntarily. In declaring these fee charging schools as no fee schools, the Provincial Education Departments (PEDs) needs to ensure all these schools are informed that they will be declared no fee schools from 1 January 2016. PEDs also need to ensure that these schools have informed parents of the change.

(N&S-78GovGaz)

GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF BASIC EDUCATION

NO. 394

28 APRIL 2017

SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 of 1996)**AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING**

I, Angelina Matsie Motshekga, Minister of Basic Education, in terms of section 35 read with section 39(7) of the South African Schools Act, 1996, (Act 84 of 1996) and with paragraphs 110 and 112 of the National Norms and Standards for School Funding (NNSF), after consultation with the Minister of Finance and the Council of Education Ministers, hereby publish amendments to the NNSF. The NNSF were published in Government Notice No. 890, Government Gazette No. 29179 of 31 August 2006.

The NNSF are hereby amended by updating the:

1. National Targets Table (Par. 109 of the NNSF) to include 2018 and 2019 indicative target amounts; and the
2. National Poverty Distribution Table (Par. 111 of the NNSF).

The amendment is contained in the Schedule. The effective date for implementation of this amendment will be 1 January 2017.



MRS AM MOTSHEKGA, MP
Minister of Basic Education

Date: 04. 04. 2017

SCHEDULE

In terms of Paragraph 110 of the NNSSF, the National Targets Table published in Government Gazette No. 40065 Government Notice No. 718, of 10 June 2016 is hereby updated to include 2019 target amounts. The no fee threshold will be R1,243 in 2017:

National table of targets for the school allocation (2017 – 2019)

	2017	2018*	2019*
NQ1	R 1,243	R 1,316	R1,394
NQ2	R 1,243	R 1,316	R1,394
NQ3	R 1,243	R 1,316	R1,394
NQ4	R 623	R 660	R699
NQ5	R 215	R 228	R241
No fee threshold	R 1,243	R 1,316	R1,394
Small schools: National fixed amount	R 28,791	R 30,490	R32,289

* 2018 and 2019 figures inflation adjusted – CPI projected inflation rate adjusted

No new data is available to update the national poverty distribution table (Paragraph 111 of the NNSSF) In terms of Paragraph 112 of the NNSSF. The table which was published in Government Gazette No. 40065 of 10 June 2016, therefore remains the basis for the national poverty targeting in 2017:

National Poverty Distribution Table						
%	Quintiles					Total
	1 poorest	2	3	4	5	
EC	27.3	24.7	19.6	17	11.4	100%
FS	20.5	20.9	22.4	20.8	15.4	100%
GP	14.1	14.7	17.9	21.9	31.4	100%
KZN	22.1	23.2	20.2	18.7	15.8	100%
LP	28.2	24.6	24.2	14.9	8	100%
MP	23.1	24.1	21.5	17.7	13.5	100%
NC	21.5	19.3	20.7	21.4	17.1	100%
NW	25.6	22.3	20.8	17.6	13.7	100%
WC	8.6	13.3	18.4	28	31.7	100%
SA	20	20	20	20	20	100%

In terms of section 39(7) of the South African Schools Act, I hereby determine all learners in quintiles 1 to 3 (60% of the public school learners nationally) to be in no fee schools for 2017.

If funds are available, and after taking into consideration the possible funding implications this may have on other poverty related programmes involving no fee schools, the PED may offer Q4 and Q5 schools no fee status at least at the threshold level of R 1,243 voluntarily. In declaring these fee charging schools as no fee schools, the Provincial Education Departments (PEDs) need to ensure all these schools are informed that they will be declared no fee schools from 1 January 2017. PEDs also need to ensure that these schools have informed parents of the change.

(N&S-85GovGaz)

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
Contact Centre Tel: 012-748 6200. eMail: info.egazette@gpw.gov.za
Publications: Tel: (012) 748 6053, 748 6061, 748 6065

GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF BASIC EDUCATION**NO. 75****02 FEBRUARY 2018****SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 of 1996)****AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING**

I, Angelina Matsie Motshekga, Minister of Basic Education, in terms of section 35 read with section 39(7) of the South African Schools Act, 1996, (Act 84 of 1996) and with paragraphs 110 and 112 of the National Norms and Standards for School Funding (NNSF), after consultation with the Minister of Finance and the Council of Education Ministers, hereby publish amendments to the NNSF. The NNSF were published in Government Notice No. 890, Government Gazette No. 29179 of 31 August 2006.

The NNSF are hereby amended by updating the:

1. National Targets Table (Par. 109 of the NNSF) to include 2019 and 2020 indicative target amounts; and the
2. National Poverty Distribution Table (Par. 111 of the NNSF).

The amendment is contained in the Schedule. The effective date for implementation of this amendment will be 1 January 2018.



MRS AM MOTSHEKGA, MP
Minister of Basic Education
Date:

SCHEDULE

In terms of Paragraph 110 of the NNSSF, the National Targets Table published in Government Gazette No. 40818 Government Notice No. 394, of 28 April 2017 is hereby updated to include 2020 target amounts. The no fee threshold will be R1,316 in 2018:

National table of targets for the school allocation (2018 – 2020)

	2018	2019*	2020*
NQ1	R 1,316	R1,390	R1,468
NQ2	R 1,316	R1,390	R1,468
NQ3	R 1,316	R1,390	R1,468
NQ4	R 660	R697	R736
NQ5	R 228	R241	R254
No fee threshold	R 1,316	R1,390	R1,468
Small schools: National fixed amount	R 30,490	R32,197	R34,000

* 2019 and 2020 figures inflation adjusted – CPI projected inflation rate adjusted

No new data is available to update the national poverty distribution table (Paragraph 111 of the NNSSF) In terms of Paragraph 112 of the NNSSF. The table which was published in Government Gazette No. 40818 of 28 April 2017, therefore remains the basis for the national poverty targeting in 2018:

National Poverty Distribution Table						
%	Quintiles					Total
	1 poorest	2	3	4	5	
EC	27.3	24.7	19.6	17	11.4	100%
FS	20.5	20.9	22.4	20.8	15.4	100%
GP	14.1	14.7	17.9	21.9	31.4	100%
KZN	22.1	23.2	20.2	18.7	15.8	100%
LP	28.2	24.6	24.2	14.9	8	100%
MP	23.1	24.1	21.5	17.7	13.5	100%
NC	21.5	19.3	20.7	21.4	17.1	100%
NW	25.6	22.3	20.8	17.6	13.7	100%
WC	8.6	13.3	18.4	28	31.7	100%
SA	20	20	20	20	20	100%

In terms of section 39(7) of the South African Schools Act, I hereby determine all learners in quintiles 1 to 3 (60% of the public school learners nationally) to be in no fee schools for 2018.

If funds are available, and after taking into consideration the possible funding implications this may have on other poverty related programmes involving no fee schools, the Provincial Education Department may offer Q4 and Q5 schools no fee status at least at the threshold level of R 1,316 voluntarily. In declaring these fee charging schools as no fee schools, the Provincial Education Departments (PEDs) need to ensure all these schools are informed that they will be declared no fee schools from 1 January 2018. PEDs also need to ensure that these schools have informed parents of the change.

(N&S-96GovGaz)

DEPARTMENT OF BASIC EDUCATION

NO. 643

06 MAY 2019

SOUTH AFRICAN SCHOOLS ACT, 1996 (ACT NO 84 of 1996)**AMENDED NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING**

I, Angelina Matsie Motshekga, Minister of Basic Education, in terms of section 35 read with section 39(7) of the South African Schools Act, 1996, (Act 84 of 1996) and with paragraphs 110 and 112 of the National Norms and Standards for School Funding (NNSSF), after consultation with the Minister of Finance and the Council of Education Ministers, hereby publish amendments to the NNSSF. The NNSSF were published in Government Notice No. 890, Government Gazette No. 29179 of 31 August 2006.

The NNSSF are hereby amended by updating the:

1. National Targets Table (Par. 109 of the NNSSF) to include 2020 and 2021 indicative target amounts; and the
2. National Poverty Distribution Table (Par. 111 of the NNSSF).

The amendment is contained in the Schedule. The effective date for implementation of this amendment will be 1 January 2019.


MRS AM MOTSHEKGA, MP
Minister of Basic Education
Date: 08 April 2019

SCHEDULE

In terms of Paragraph 110 of the NNSSF, the National Targets Table published in Government Gazette No. 41420 Government Notice No. 75, of 02 February 2018 is hereby updated to include 2021 target amounts. The no fee threshold will be R1,390 in 2019:

National table of targets for the school allocation (2019 – 2021)

	2019	2020*	2021*
NQ1 – NQ3	1,390	1,466	1,547
NQ4	697	735	776
NQ5	241	254	268
No fee threshold	1,390	1,466	1,547
Small schools: National fixed amount	32,197	33,968	35,836

* 2020 and 2021 figures inflation adjusted – Consumer price index (CPI) projected inflation rate adjusted

No new data is available to update the national poverty distribution table (Paragraph 111 of the NNSSF) In terms of Paragraph 112 of the NNSSF. The table which was published in Government Gazette No. 41420 of 02 February 2018, therefore remains the basis for the national poverty targeting in 2019:

National Poverty Distribution Table						
%	Quintiles					Total
	1 poorest	2	3	4	5	
EC	27.3	24.7	19.6	17	11.4	100%
FS	20.5	20.9	22.4	20.8	15.4	100%
GP	14.1	14.7	17.9	21.9	31.4	100%
KZN	22.1	23.2	20.2	18.7	15.8	100%
LP	28.2	24.6	24.2	14.9	8	100%
MP	23.1	24.1	21.5	17.7	13.5	100%
NC	21.5	19.3	20.7	21.4	17.1	100%
NW	25.6	22.3	20.8	17.6	13.7	100%
WC	8.6	13.3	18.4	28	31.7	100%
SA	20	20	20	20	20	100%

In terms of section 39(7) of the South African Schools Act, I hereby determine all learners in quintiles 1 to 3 (60% of the public school learners nationally) to be in no fee schools for 2019.

If funds are available, and after taking into consideration the possible funding implications this may have on other poverty related programmes involving no fee schools, the Provincial Education Department (PED) may offer Q4 and Q5 schools no fee status at least at the threshold level of R 1,390 voluntarily. In declaring these fee charging schools as no fee schools, the PEDs need to ensure all these schools are informed that they will be declared no fee schools from 1 January 2019. PEDs also need to ensure that these schools have informed parents of the change.

(N&S-96GovGaz)

GOVERNMENT NOTICE

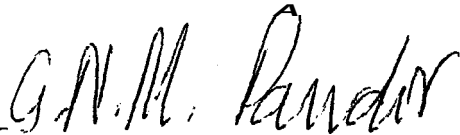
DEPARTMENT OF EDUCATION

No. R. 1052

18 October 2006

SOUTH AFRICAN SCHOOLS ACT, NO. 84 OF 1996
REGULATIONS RELATING TO THE EXEMPTION OF PARENTS FROM
PAYMENT OF SCHOOL FEES IN PUBLIC SCHOOLS

I, Grace Naledi Mandisa Pandor, Minister of Education, after consultation **with** the Council of Education Ministers and the Minister of Finance, and **in** terms of sections 39(4) **and** 61 of the **South** African Schools Act, 1996 (Act No. **84** of 1996), hereby publish the regulations in the Schedule for general information.



GRACE NALEDI MANDISA PANDOR, MP
MINISTER OF EDUCATION

DATE: 8-10-2006

SCHEDULE

1. Definitions

In these regulations, any word or expression to which a meaning has been assigned in the Act shall have the meaning so assigned to it **and**, unless the context indicates otherwise –

“application” means an application by a parent for total, partial or conditional exemption from paying school fees;

“automatic exemption” means the total exemption available to –

- (a) a person who has the responsibility of a parent in respect of a child placed in –
 - (i) a foster home;
 - (ii) a youth care centre;
 - (iii) a place of safety; or
 - (iv) an orphanage;
- (b) a person who is a kinship caregiver of an orphan or of a child who –
 - (i) has been abandoned by his or her parents; and
 - (ii) is without any visible means of support;
- (c) a person who receives a social grant on behalf of a child; or
- (d) a child who heads a household;

“combined annual gross income of parents” means the annual gross income of the parents, calculated together, or, if a learner has only one parent, the total annual gross income of such parent;

“competent authority” includes a chief, minister of religion or headman, or a councillor of a local authority;

“conditional exemption” means the exemption granted to a parent who –

- (a) qualifies for partial exemption but, owing to personal circumstances beyond his or her control, cannot pay even the reduced amount; or
- (b) does not qualify for exemption but supplies information indicating his or her inability to pay school fees owing to personal circumstances beyond his or her control,

which exemption the school governing body grants with the proviso that the parent agrees to certain conditions for the payment of the school fees;

“exemption” means the total, partial or conditional exemption of parents who are unable to pay school fees from the payment of such fees;

“income” means –

- (a) gross salary or wages;
- (b) money received from investments; and

- (c) profit gained from any form of business undertaking;

“parent” means a parent as defined in the Act;

“partial exemption” means the financial concession granted to a parent in terms of which he or she is liable for the payment of only a portion of the school fees;

“the Act” means the South African Schools Act, 1996 (Act No. 84 of 1996); and

“total exemption” means the financial concession –

- (a) granted to a parent in accordance with the calculation result contemplated in regulation 6(3); or
- (b) available to a parent as a result of his or her qualifying for the automatic exemption contemplated in regulation 4(3).

2. Scope and application

- (1) These regulations must be interpreted within the framework of the Act and of the National Norms and Standards for School Funding.
- (2) These regulations apply to all public schools except public schools that are declared no fee schools.

3. Obligations of governing bodies and principals when learner is admitted to public school

- (1) The principal must notify a parent of the following:
 - (a) the amount of the annual school fees to be paid and procedures for applying for exemption;
 - (b) the fact that the parent is liable for the payment of school fees unless he or she has been exempted from the payment thereof;
 - (c) a form (Annexure A), contemplated in section 41(4)(c) of the Act, must be completed by the parent and signed by the principal of the school and by the parent, indicating that the parent has been informed about the provisions of paragraphs (a) and (b);
 - (d) one copy of the signed form contemplated in paragraph (c) will be handed over to the parent when the learner is admitted to the public

school, another will be submitted to the Head of Department or his or her delegate as soon as possible, and the original will be filed at the school; and

(e) if a parent is in arrears by one month or more, the governing body will investigate whether the parent qualifies for exemption before acting in terms of section 41(1) of the Act.

- (2) The governing body must cause a copy of these regulations to be displayed at the school in a conspicuous place.
- (3) The governing body must, on request, provide the parent with a copy of these regulations.
- (4) The governing body must treat as confidential all information that a parent provides in support of his or her application, and may not divulge such information to a third party without the consent of the parent, except to the Head of Department or his or her delegate.

4. Obligations of parents

- (1) A parent who wishes to be exempted from the payment of school fees for a child at a particular school must apply annually to the chairperson of the governing body in writing, by completing the form contained in Annexure B of these regulations, supplied by the principal.
- (2) An applicant must furnish such relevant further particulars as the governing body may request.
- (3) A parent qualifies for automatic exemption if he or she submits to the governing body sufficient proof of eligibility for such exemption by providing documentary evidence in the form of -
 - (a) an affidavit;
 - (b) a confirmation affidavit from a social worker or from any other competent authority; or
 - (c) a court order.

5. Categories for purposes of exemption

The following categories apply for purposes of exempting a parent from the payment of school fees:

- (1) Total exemption;
- (2) partial exemption;
- (3) conditional exemption, and
- (4) no exemption.

6. Procedure according to which governing body must consider application

- (1) The governing body must consider the application subject to these Regulations and must make a decision within 30 days after receipt of the application.

- (2) (a) The governing body must apply the following formula when considering the application for exemption:

$$E = 100 \left(\frac{F + A}{C} \right)$$

where -

E = school fees as a proportion of the income of a parent.

F = annual school fees, for one child, that a school charges in terms of section 39 of the Act.

A = additional monetary contributions paid by a parent in relation to a learner's attendance of, or participation in any programme of, a public school.

C = combined annual gross income of parents.

100 = the number by which the answer arrived at in the brackets is multiplied so as to convert it into a percentage.

- (b) The annual school fees of only one learner must be used in the formula.

- (c) If a parent has more than one child at the same school and the school fees are not the same for all of them, the highest school fees must be used in the formula.
- (3) If E is equal to or greater than 10%, the parent qualifies for total exemption.
- (4)
 - (a) If E is equal to 3,5%, the parent qualifies for partial exemption.
 - (b) If E is equal to 2,5%, the parent does not qualify for any exemption, unless he or she has three or more other children at the same public school or at another public school that has not been declared a no fee school.
 - (c) If E is equal to 3,0%, the parent does not qualify for any exemption, unless he or she has one or more children at the same public school or at another public school that has not been declared a no fee school.
- (5)
 - (a) If E is less than 2,0%, the parent does not qualify for any exemption.
 - (b) If E is equal to 2,0%, the parent does not qualify for any exemption, unless he or she has five or more other children at the same public school or at another public school that has not been declared a no fee school.
- (6)
 - (a) The table below determines the level of exemption.
 - (b) The table applies only to a parent who qualifies for partial exemption.
 - (c) Column one of the table applies to a parent who has only one child at a public school.
 - (d) Columns two to 10 apply to a parent who has more than one child at the same public school or at more than one public school that have not been declared no fee schools.
 - (e) The governing body must take into account all the learners contemplated in paragraph (d) when applying the table.

E =	NUMBER OF LEARNERS									
	1	2	3	4	5	6	7	8	9	10
2.0%	0%	0%	0%	0%	0%	11%	20%	27%	33%	38%
2.5%	0%	0%	0%	14%	25%	33%	40%	45%	50%	54%
3.0%	0%	7%	22%	33%	42%	48%	53%	58%	61%	64%
3.5%	7%	26%	38%	47%	54%	59%	63%	66%	69%	71%
4.0%	25%	40%	50%	57%	63%	67%	70%	73%	75%	77%
4.5%	39%	51%	59%	65%	69%	73%	76%	78%	80%	81%
5.0%	50%	60%	67%	71%	75%	78%	80%	82%	83%	85%
5.5%	59%	67%	73%	77%	80%	82%	84%	85%	86%	87%
6.0%	67%	73%	78%	81%	83%	85%	87%	88%	89%	90%
6.5%	73%	78%	82%	85%	87%	88%	89%	90%	91%	92%
7.0%	79%	83%	86%	88%	89%	90%	91%	92%	93%	93%
7.5%	83%	87%	89%	90%	92%	93%	93%	94%	94%	95%
8.0%	88%	90%	92%	93%	94%	94%	95%	95%	96%	96%
8.5%	91%	93%	94%	95%	96%	96%	96%	97%	97%	97%
9.0%	94%	96%	96%	97%	97%	98%	98%	98%	98%	98%
9.5%	97%	98%	98%	98%	99%	99%	99%	99%	99%	99%
10.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

- (7) In the case of conditional exemption, the governing body may attach to an exemption granted to an applicant such conditions as it may deem reasonable.
- (8) An applicant must, if he or she so requests, be afforded an opportunity to present his or her application in person or through a representative designated by him or her.
- (9) The governing body must, in writing and within seven days after its decision is taken, notify each applicant of the decision and the reason therefor.

- (10) The governing body must, in writing and within seven days after considering the documentary evidence contemplated in regulation 4(3), notify a parent whether or not he or she qualifies for automatic exemption.
- (11) A governing body must, at or before the end of the first school term each year, submit to the Head of Department or his or her delegate a provisional table indicating -
- (a) the number of applications for exemption of parents from the payment of school fees considered;
 - (b) the number of total exemptions granted;
 - (c) the number of partial exemptions granted; and
 - (d) the number of applications not granted.
- (12) A final table must be submitted on or before 30 November of each year.
- (13) If an application contemplated in regulation 4(1) is declined or a parent does not qualify for automatic exemption, the notices contemplated in subregulations (9) and (10) must include the right of appeal in terms of section 40(2) of the Act.
- (14) If a parent does not qualify for exemption, the governing body may take steps in terms of section 41 of the Act against him or her only after –
- (a) notifying the parent in terms of subregulation (9) or (10), as the case may be; and
 - (b) considering reasonable forms of payment other than cash.
- (15) Illustrations with regard to the application of the formula are reflected in Annexure C.

7. Alteration of decision

- (1) If a governing body has granted a parent exemption and later obtains information that the financial position of the parent has since changed substantially, the governing body may –
 - (a) reconsider the decision to grant exemption; and
 - (b) amend the amount that the parent must pay from the date on which the change took place.
- (2) The amended amount that the parent must pay is the amount for the full year less the amount of exemption that had been granted to him or her.
- (3) Before taking action in terms of subregulation (1), the governing body must –
 - (a) notify the parent concerned of the intended action and of the information on which it will be based; and
 - (b) afford the parent the opportunity to rebut, if need be, the information and to show cause why the exemption should not be reconsidered.
- (4) Despite subregulation (1), the amount that the parent must pay must be calculated from the date on which his or her financial position changed.

8. Procedure for appeal

- (1) A parent who is dissatisfied with the decision referred to in regulation 6(1) may, in writing and within 30 days after receipt of the notification of that decision, appeal to the Head of Department against the decision.
- (2) The appellant contemplated in subregulation (1) must furnish the Head of Department with –
 - (a) the reasons for the appeal; and
 - (b) all relevant information pertaining to the appeal.
- (3) The Head of Department must, within 14 days after receipt of the documentation referred to in subregulation (2) –

- (a) notify the chairperson of the governing body concerned that –
 - (i) the appeal has been lodged; and
 - (ii) the governing body must take no action in terms of section 41 of the Act against the parent until the appeal has been finalised;
 - (b) furnish the chairperson with a copy of the appellant's reasons for the appeal; and
 - (c) request the chairperson to forward to him or her, within 14 days after receipt of the request –
 - (i) a copy of the minutes of the meeting of the governing body at which the application was discussed and decided upon;
 - (ii) any comments the governing body wishes to make **with** regard to the appellant's reason for the appeal; and
 - (iii) any other information relevant to the appeal.
- (4) After consideration of all information referred to in subregulations (2) and (3)(c), the Head of Department must, within 14 days of receipt of the documentation –
- (a) uphold the appeal; or
 - (b) dismiss the appeal.
- (5) Within seven days of deciding the appeal, the Head of Department must, in writing, notify the appellant and the chairperson of the governing body concerned of his or her decision and the reasons therefor.
- (6) A parent has the right to appeal to the Head of Department if he or she is not satisfied about the notice contemplated in regulation 6(10).

9. Assistance to parents

- (1) A parent who, for whatever reason, needs assistance in applying for exemption or lodging an appeal may request **an** educator or any other person to assist him or her in making the application or lodging the appeal.

- (2) If no assistance is given to the parent after he or she has requested it as contemplated in subregulation (1), the principal of the school concerned must assist the parent with such application or appeal, if so requested by the parent.
- (3) No applicant may be disqualified on the ground that his or her application form is either incomplete or incorrectly completed.
- (4) The principal or the educator who is a member of the governing body of the school concerned must help parents with any application forms that have not been completed properly.

10. Assistance to schools

- (1) The provincial education department must develop measures for assisting schools in applying the formula contemplated in regulation 6.
- (2) A public school may approach the provincial education department for assistance in applying the formula.

11. Voluntary contributions

Nothing in the Regulations prevents a parent who has been granted any type of exemption from making a voluntary contribution to the school fund.

12. Revocation of Regulations

The Exemption of Parents from the Payment of School Fees Regulations, 1998 (*Government Gazette* 19347 of 12 October 1998), are hereby revoked in their entirety.

13. Short title and commencement

These Regulations may be cited as the Regulations for the Exemption of Parents from the Payment of School Fees, 2005, and will come into effect on the date of publication in the *Government Gazette*. The implementation date is 1 January **2007**.

ANNEXURE A

SOUTH AFRICAN SCHOOLS ACT, NO. 84 OF 1996
REGULATIONS FOR THE EXEMPTION OF PARENTS FROM PAYMENT
OF SCHOOL FEES
CHECKLIST FORM *

(Mark with a cross in applicable box,)

1.	Has the principal informed you about the amount of the annual school fees to be paid?	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <td style="padding: 5px; width: 50%; text-align: center;">YES</td> <td style="padding: 5px; width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO			
2.	Has the principal informed you that you are liable for the payment of school fees unless you are totally exempted from paying school fees?	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <td style="padding: 5px; width: 50%; text-align: center;">YES</td> <td style="padding: 5px; width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO			
3.	Has the principal informed you about your right to apply for exemption from paying school fees?	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <td style="padding: 5px; width: 50%; text-align: center;">YES</td> <td style="padding: 5px; width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO			
4.	Do you wish to apply for such exemption?	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <td style="padding: 5px; width: 50%; text-align: center;">YES</td> <td style="padding: 5px; width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO			
5.	Do you wish to be assisted in making such application?			
6.	Has the principal provided you with the form (Annexure B) for application for exemption?	<table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <td style="padding: 5px; width: 50%; text-align: center;">YES</td> <td style="padding: 5px; width: 50%; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO			

 Name of Principal

 Name of Parent

 Signature of Principal

 Signature of Parent

Date: _____

Date: _____

School stamp:

- * One copy of the signed form will be handed over to the parent, another will be submitted to the Head of Department or his or her delegate, and the original will be filed at the school.

ANNEXURE B

SOUTH AFRICAN SCHOOLS ACT, NO. 84 OF 1996

REGULATIONS FOR THE EXEMPTION OF PARENTS FROM PAYMENT
OF SCHOOL FEES
APPLICATION FOR EXEMPTION

1. PARTICULARS OF SCHOOL

Name:

Postal address:

.....
.....
.....
.....

Residential address:

.....
.....
.....
.....

Tel.:

Fax:

2. PERSONAL PARTICULARS OF PARENT

Name of parent':

.....

Residential address:

.....
.....

¹ "Parent" means (a) a natural parent or guardian of a learner; (b) a person legally entitled to custody of a learner; or (c) a person who undertakes to fulfil the obligations of a person referred to in paragraphs (a) and (b) towards a learner's education at school.

.....

.....

Tel.:

Fax:

Name of learner for whom application is made:

.....

Name(s) of learner(s) at the same public school or at another public school that has not been declared a no fee school.

Name	ID no.	Grade	Amount of school fees	Additional monetary contribution	Name of school	Tel. no. of school
(1)						
(2)						
(3)						
(4)						
(5)						
(6)						
(7)						
(8)						
(9)						
(10)						

3. FINANCIAL PARTICULARS OF PARENT

Parent must, where applicable, supply the following:

3.1 Combined annual gross income:

R..

(Attach salary advice, if applicable.)

3.2. Money received from investment:

R..

3.3 Profit gained **from** any form of business:

(Please provide documentary proof.)

3.4 School fees for the applicant's child at the school:

3.5 Additional monetary contributions paid by a parent in relation to a learner's attendance of, or participation in any programme of, a public school:

4. ADDITIONAL INFORMATION

Any other relevant information supplied by the applicant, indicating the inability to pay school fees owing to personal circumstances, that may lead to conditional exemption:

[illegible]

5. MANNER OF DELIVERY OF THE APPLICATION FORM

The application form and accompanying documents must be sealed in an envelope addressed to the chairperson of the governing body and must be delivered to the school concerned by hand or by registered post.

Name of Parent

Signature of Parent

Date: _____

Name of Chairperson

Signature of Chairperson

Date: _____

School **stamp:**

ANNEXURE C

SOUTH AFRICAN SCHOOLS ACT, NO. 84 OF 1996

REGULATIONS FOR THE EXEMPTION OF PARENTS FROM PAYMENT
OF SCHOOL FEES1. Total exemption

1.1 Illustration

A parent has one child in the school in question. Annual school fees are R2 500, **annual** additional monetary contributions amount to R20, and the parent's annual gross income is **R25 200**.

To determine whether the parent qualifies for exemption, the following formula must be applied:

$$E = 100 \left(\frac{F + A}{C} \right)$$

$$\therefore E = 100 \left(\frac{2\,500 + 20}{C} \right)$$

$$\therefore E = 100 \left(\frac{2\,520}{25\,200} \right)$$

$$\therefore E = 100 \times 0,1$$

$$\therefore E = 10\%$$

Since E is equal to **10%**, in terms of regulation 6(3) the parent qualifies for total exemption.

1.2 Illustration

A parent whose annual gross income is R20 000 applies for exemption from the annual school fees of R2 500 per learner at a school where the annual additional monetary contributions amount to R20.

To determine whether the parent qualifies for exemption, the following formula **must** be applied:

$$E = 100 \left(\frac{F + A}{C} \right)$$

$$\therefore E = 100 \left(\frac{2\,500 + 20}{20\,000} \right)$$

$$\therefore E = 100 \left(\frac{2\,520}{20\,000} \right)$$

$$\therefore E = 100 \times 0,126$$

$$\therefore E = 12,6\%$$

Since E is greater than 10%, in terms of regulation 6(3) the parent qualifies for total exemption.

1.3 Illustration

A couple **has** one child in the school in question and the annual school fees are **R5** 000. The annual additional monetary contributions amount to **R500**. The parents' annual gross income is R20 000.

To determine whether the parents qualify for exemption, the following formula must be applied

$$E = 100 \left(\frac{F + A}{C} \right)$$

$$\therefore E = 100 \left(\frac{5\,000 + 500}{12\,000 + 8\,000} \right)$$

$$\therefore E = 100 \left(\frac{5\,500}{20\,000} \right)$$

$$\therefore E = 100 \times 0,275$$

$$\therefore E = 27,5\%$$

Since E is greater than **10%**, in terms of regulation 6(3) the parents qualify for total exemption.

2. Partial exemption

2.1 Illustration

A parent **has** one child in the school in question. The annual school fees are R2 500, annual additional monetary contributions amount to R20 and the parent's annual **gross** income is R30 000.

To determine whether the parent qualifies for exemption, the following formula must be applied:

$$E = 100 \left(\frac{F + A}{C} \right)$$

$$\therefore E = 100 \left(\frac{2\,500 + 20}{30\,000} \right)$$

$$\therefore E = 100 \left(\frac{2\,520}{30\,000} \right)$$

$$\therefore E = 100 \times 0,84$$

$$\therefore E = 8,4\% \text{ (rounded up to } 8,5\%)$$

$$\therefore E < 10\%$$

Since E is less than 10%, in terms of regulation 6(4) the parent qualifies for partial exemption.

To determine the level of the exemption, the table in regulation 6(6) must be used.

Therefore, because the parent has one child in the school in question **and** the percentage of his or her expenditure over income is 8,5%, the parent qualifies for a 91% fee exemption.

Annual school fees	=	R2 500
Level of exemption	=	91%
91% of R2 500	=	R2 275

The **annual** school fees at the school in question minus the amount of exemption calculated above is the amount that the parent must pay, calculated **as** follows:

$$\begin{array}{r} 2\,500 \\ - \underline{2\,275} \\ = R225 \end{array}$$

The parent must therefore pay school fees of R225.

2.2 Illustration

A parent's annual gross income is R28 000. Annual school fees for one learner are R2 500 and the annual additional monetary expenses amount to R20. The parent also has one other child in the same school and two other children in another public school that has not been declared a no fee school.

To determine whether the parent qualifies for exemption, the formula must be applied in respect of one child, as follows:

$$E = 100 \left(\frac{F + A}{C} \right)$$

$$\therefore E = 100 \left(\frac{2\,500 + 20}{28\,000} \right)$$

$$\therefore E = 100 \left(\frac{2\,520}{28\,000} \right)$$

$$\therefore E = 100 \times 0,09$$

$$\therefore E = 9\%$$

$$\therefore E < 10\%$$

Since E is less than 10%, the parent qualifies for partial exemption. To determine the level of the exemption, the table in regulation 6(6) must be used, but this time, all four children must be taken into account (that is, the parent must look in the fourth column under "Number of learners" in the table).

Annual school fees	=	R2 500
Level of exemption	=	97%
97% of R2 500	=	R2 425

The annual school fees at the school in question minus the level of exemption is the amount that the parent must pay, calculated as follows:

$$\begin{aligned}
 & 2\,500 \\
 & - \underline{2\,425} \\
 & = \text{R}75
 \end{aligned}$$

The parent must therefore pay school fees of R75.

3. **No exemption**

3.1 **Illustration**

A parent has one child in the school in question. The annual school fees are R2 500, annual additional monetary contributions amount to R20, and the parent's **annual** gross income is R126 000.

To determine whether the parent qualifies for exemption, the following formula must be applied:

$$E = 100 \left(\frac{F + A}{C} \right)$$

$$\therefore E = 100 \left(\frac{2\,500 + 20}{126\,000} \right)$$

$$\therefore E = 100 \left(\frac{2\,520}{126\,000} \right)$$

$$\therefore E = 100 \times 0,02$$

$$\therefore E = 2\%$$

$$\therefore E < 10\%$$

Since E is equal to 2%, in terms of regulation 6(5) the parent does not qualify for any exemption and must pay the full school fees. However, if the parent had six or more children at school, he or she would qualify for partial exemption.

3.2 Illustration

A parent has one child in the school in question. The annual school fees are R2 500, annual additional monetary contributions amount to R20, and the parent's annual gross income is R150 000.

To determine whether the parent qualifies for exemption, the following formula must be applied:

$$E = 100 \left(\frac{F + A}{C} \right)$$

$$\therefore E = 100 \left(\frac{2\,500 + 20}{150\,000} \right)$$

$$\therefore E = 100 \left(\frac{2\,520}{150\,000} \right)$$

$$\therefore E = 100 \times 0,168$$

$$\therefore E = 1,68\%$$

$$\therefore E < 2\%$$

Therefore, since E is less than 2%, in terms of regulation 6(5) the parent does not qualify for any exemption and must pay the full school fees.

GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF BASIC EDUCATION

NO. 170

12 FEBRUARY 2016

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

G.N. 222 of 1999 published in *Government Gazette* No. 19767 dated 18 February 1999

as amended by

- G.N. 247 of 2000 published in *Government Gazette* No. 20986 dated 17 March 2000
G.N. 1430 of 2000 published in *Government Gazette* No. 21950 dated 29 December 2000
G.N. 155 of 2001 published in *Government Gazette* No. 22066 dated 17 February 2001
G.N. 774 of 2001 published in *Government Gazette* No. 22594 dated 24 August 2001
G.N. 1254 of 2001 published in *Government Gazette* No. 22878 dated 7 December 2001
G.N. 1400 of 2001 published in *Government Gazette* No. 22961 dated 19 December 2001
G.N. 78 of 2002 published in *Government Gazette* No. 23052 dated 25 January 2002
G.N. 244 of 2002 published in *Government Gazette* No. 23187 dated 1 March 2002
G.N. 1287 of 2002 published in *Government Gazette* No. 23934 dated 11 October 2002
G.N. 3417 of 2002 published in *Government Gazette* No. 24140 dated 12 November 2002
G.N. 267 of 2003 published in *Government Gazette* No. 24948 dated 21 February 2003
G.N. 1140 Published in *Government Gazette* No. 28264 dated 25 November 2005
G.N. 714 Published in *Government Gazette* No. 29056 dated July 2006
G.N. 692 Published in *Government Gazette* No. 30134 dated 30 July 2007
G.N. 781 Published in *Government Gazette* No. 30232 dated 29 August 2007
G.N. 25 Published in *Government Gazette* No. 30678 dated 18 January 2008
G.N. 948 Published in *Government Gazette* No. 38249 dated 27 November 2014

**CONSOLIDATION OF THE TERMS AND CONDITIONS OF EMPLOYMENT OF EDUCATORS DETERMINED IN
TERMS OF SECTION 4 OF THE EMPLOYMENT OF EDUCATORS ACT 1998**

I, Angie Matsie Motshekga, Minister of Basic Education have, in terms of section 4 of the Employment of Educators Act 1998, determined and consolidated the terms and conditions of employment of educators as set out in the Schedule below.


AM MOTSHEKGA**Minister of Basic Education**

SCHEDULE

Personnel Administration Measures (PAM) determined by the Minister of Education in terms of the Employment of Educators Act 1998 (the Act) and the Regulations made in terms of the Act (Regulations)

TABLE OF CONTENTS

ACRONYMS	1
CHAPTER A : POST PROVISIONING AND GRADING NORMS, WORKLOAD AND JOB DESCRIPTIONS.....	2
A.1 Scope Of Applicability.....	2
A.2 Norms/Guidelines For The Purposes Of Establishment Determination	2
A.3 Grading Of Institutions (<i>ELRC Collective Agreements No. 3 of 2006 and No. 1 of 2008</i>).....	5
A.4 Workload Of School-Based Educators (<i>ELRC Resolution No. 7 of 1998</i>)	7
A.5 Duties And Responsibilities Of Educators (<i>ELRC Resolution No. 8 of 1998</i>)	10
Annexure A.1 : Post Distribution Model for the Allocation of Educator Posts to Schools	11
Annexure A.2 : Core Duties and Responsibilities: Teacher.....	18
Annexure A.3 : Core Duties and Responsibilities: Senior Teacher	21
Annexure A.4 : Core Duties and Responsibilities: Master Teacher.....	24
Annexure A.5 : Core Duties and Responsibilities: Departmental Head.....	27
Annexure A.6 : Core Duties and Responsibilities: Deputy Principal	30
Annexure A.7 : Core Duties and Responsibilities: Principal	32
Annexure A.8 : Core Duties and Responsibilities: Office-Based Educators	36
CHAPTER B : APPOINTMENTS, TRANSFER OF EDUCATORS IN TERMS OF OPERATIONAL REQUIREMENTS, POST STRUCTURE, SALARY AND QUALIFICATION RELATED MATTERS	40
B.1 Relative Education Qualification Value (REQV).....	40
B.2 Post Structure	41
B.3 Appointments in Education.....	42
B.4 Possible Career Path Opportunities and Requirements for Appointment/Upgrade/Promotion ..	83
B.5 Advertising and Filling of Educator Posts (<i>ELRC Resolution 5 of 1998</i>).....	85
B.6 Transfer of Serving Educators in Terms of Operational Requirements (<i>ELRC Collective Agreement 2 of 2003</i>).....	89
B.7 Position of a Principal in a Case where a School is Regraded (Upgraded or Downgraded) (<i>Government Gazette No. 22594, dated 24 August 2001</i>).....	91
B.8 Salaries Applicable to Educator Posts	92
B.9 Salary Adjustments	101
B.10 Recognition For Improvement in REQV	102

B.11	Dates on which Salaries of Educators Employed at an Institution Commence and Terminate (<i>Regulation 6 of the Regulations regarding the terms and conditions of employment of educators</i>)	104
B.12	Incorrectly Granted Remuneration (<i>Regulation 13 of the Regulations regarding the terms and conditions of employment of educators</i>)	105
B.13	Unauthorised Remuneration (<i>Regulation 14 of the Regulations regarding the terms and conditions of employment of educators</i>)	106
	Annexure B.1: Salary Adjustments: December 1984 to July 1995.....	107
	Annexure B.2 : Implementation of the Broad Band Salary System on 1 July 1996	108
	Annexure B.3 : Implementation of the New Post and Salary Structure on 1 April 2003 per Post Level	110
	Annexure B.4 : Educator Salary Scales: July 1996 to July 2007 and Translation Tables January 2008	112
	Annexure B.5 : OSD Key Salary Scale for Institution-Based and Office-Based Educators: January 2008 – July 2010 (Basic Salary)	116
	Annexure B.6 : OSD: Inclusive Remuneration Packages for Office-Based Educators (January 2008 – April 2014).....	119
	Annexure B.7 : Educator Non-OSD Salary Scales: July 2008 – May 2012	121
	Annexure B.8 : Non-OSD: Inclusive Remuneration Packages for Office-Based Educators July 2005 – May 2012	122
	Annexure B.9 : OSD for Educations Therapists and Psychologists: Salary Scales, Post Class Codes and Job Title Codes: 2010 - 2014	123
	Annexure B.10 : OSD Rank and Salary Codes for School-Based and Office-Based Educators	126
	CHAPTER C : ALLOWANCES AND OTHER PAYMENTS	130
C.1	General.....	130
C.2	Allowance to a Principal of a School with only One Educator Post (<i>ELRC Collective Agreement No. 1 of 2008</i>)	130
C.3	Allowance to Educators who Perform Supervisory Duties at Hostels.....	130
C.4	Acting Allowances.....	133
C.5	Educators Paid on a Per-Hour Basis for Tuition or Full-Time Educators who Perform Paid Overtime Duties	136
C.6	Educators Appointed on a Proportional Basis	137
C.7	Payment of Educators Voluntarily Performing Additional Duties (<i>Government Gazette No 30536, dated 7 December 2007</i>)	137
C.8	Educators who Perform Educational Supervisory Duties at Institutions for Learners with Behaviour Problems or at Special Schools Dealing with Children in terms of the Children's Act during Institution Closure Periods that are Outside of Scheduled Working Time (<i>ELRC Collective Agreement No. 7 of 2001 and Government Gazette No 22961, dated 19 December 2001</i>)	138
	CHAPTER D : PUBLIC EXAMINATIONS (Government Gazette No 34079, dated 7 March 2011)	140
D.1	Duties Performed in Respect of Public Examination.....	140

D.2	Remuneration for the Performance of Examination-Related Duties	141
D.3	Compensation for Travel and Subsistence Expenses.....	142
D.4	Criteria for the Appointment of Educators for Examination-Related Work.....	143
CHAPTER E : AWARDS AND BENEFITS		146
E.1	Department-Specific Benefits and Awards.....	146
E.2	Measures Prescribed by Legislation not Administered by the Minister of Basic Education and Service Benefits which Apply to all Employees of the State.....	150
E.3	Retrenchment Package.....	151
E.4	Employee-Initiated Severance Package (EISP) (<i>Government Gazette No. 29056, dated 21 July 2006 and the Determination on the introduction of an employee-initiated severance package for the public service (revised), January 2006</i>).....	152
Annexure E.1 : Allowance and Subsidies (Amounts).....		153
CHAPTER F : TIME OFF AND SECONDMENT.....		154
F.1	Introduction.....	154
F.2	General.....	154
F.3	Time Off.....	155
F.4	Secondment to Trade Unions.....	157
F.5	Secondment of Shop Stewards (<i>ELRC Collective Agreement No. 2 of 2007</i>)	159
ANNEXURE F.1: SS Distribution.....		165
CHAPTER G : GRIEVANCE PROCEDURE		166
G.1	Definitions.....	166
G.2	Objective	167
G.3	Adherence to Time Limits	167
G.4	Dealing with Grievances.....	167
Annexure G.1: Grievance Form		170
CHAPTER H : LEAVE MEASURES		174
H.1	Definitions	174
H.2	Legislative Framework	175
H.3	General Provisions	176
H.4	Annual Leave	176
H.5	Sick Leave.....	184
H.6	Leave for Occupational Injuries and Diseases.....	190
H.7	Special Leave for Quarantine Purposes	190
H.8	Maternity Leave, Pre-Natal and Paternity Leave.....	190
H.9	Adoption and Surrogacy Leave.....	192
H.10	Family Responsibility Leave and Special Leave for Urgent Private Affairs	192
H.11	Special Leave FOR Professional and Personal Development and for Religious Observances.....	194
H.12	Special Leave for Study Purposes.....	194
H.13	Special Leave for Examination Purposes.....	194

H.14 Special Leave for Participating In Sporting, Cultural and Other Events	195
H.15 Special Leave in Extraordinary Circumstances	195
H.16 Unpaid Leave	195
dH.17 Unpaid Leave for Continuity OF Service	195
H.18 Leave Provisions for Educators in a Temporary Capacity (Fixed Term Contract) (<i>PSCBC Resolution 1 of 2007, Government Gazette No. 30134, dated 30 July 2007 and the Determination on leave of absence in the public service, July 2009</i>).....	196
Annexure H.1: Application for Leave of Absence: School-Based Educators (<i>Government Gazette No 38249, dated 27 November 2014</i>).....	198
Annexure H.2: Agreement: Special Leave for Study Purposes	199
CHAPTER I : GENERAL PROVISIONS	200
I.1 Exemption from Payment for Instructions by Educational Institutions	200
I.2 Full-Time Study Course.....	200
I.3 Official Channels of Communication	200
I.4 Replying to Questions.....	200
I.5 Lawful Instructions	201
I.6 Residential Addresses and Telephone Numbers	201
I.7 Proof of Marriage or Change of Marital Status	201
I.8 Reports on Educators and Adverse Remarks	201

ACRONYMS

ABC	Activity-based costing
COLTS	Culture of learning, teaching and services
DBE	Department of Basic Education
DG	Director-General
EEA	Employment of Educators Act, 1998
EISP	Employee initiated severance package
ELRC	Education Labour Relations Council
EMD	Education management development
GPS	Global positioning system
GS	General Secretary of the ELRC
HoD	Head of Department
HPCSA	Health Professions Council of South Africa
ICT	Information and communication technology
INSET	In-service education for teachers
LIFO	Last in, first out
LRA	Labour Relations Act, 1995
LSEN	Learners with special education needs
MASP	Mutually agreed to severance package
MEC	Member of the Executive Council
MTEF	Medium term expenditure framework
NEPA	National Education Policy Act, 1996
NQF	National Qualifications Framework
OSD	Occupation Specific Dispensation
PAIA	Promotion of Access to Information Act, 2000
PAM	Personnel Administrative Measures
REQV	Relative education qualification value
RSA	Republic of South Africa
SACE	South African Council for Educators
SASA	South African Schools Act, 1996
SGB	School governing body
SMT	School management team
SRC	Student Representative Council
SS	Shop steward

CHAPTER A

POST PROVISIONING AND GRADING NORMS, WORKLOAD AND JOB DESCRIPTIONS

- A.1 SCOPE OF APPLICABILITY**
- A.2 NORMS/GUIDELINES FOR THE PURPOSES OF ESTABLISHMENT DETERMINATION**
- A.3 GRADING OF INSTITUTIONS**
- A.4 WORKLOAD OF SCHOOL-BASED EDUCATORS**
- A.5 DUTIES AND RESPONSIBILITIES OF EDUCATORS**

ANNEXURE

Annexure A.1	Post distribution model for the allocation of educator posts to schools
Annexure A.2	Core duties and responsibilities: Teacher
Annexure A.3	Core duties and responsibilities: Senior Teacher
Annexure A.4	Core duties and responsibilities: Master Teacher
Annexure A.5	Core duties and responsibilities: Departmental Head
Annexure A.6	Core duties and responsibilities: Deputy Principal
Annexure A.7	Core duties and responsibilities: Principal
Annexure A.8	Core duties and responsibilities: Office-based educators

A.1 SCOPE OF APPLICABILITY

- A.1.1 This PAM is applicable to all educators as defined in the EEA.
- A.1.2 There may, in respect of the matters regulated in this PAM, be no deviation from the prescribed measures: Provided that should there be cases not covered in the measures contained herein or should there be any doubt as to the application of the provisions in individual cases, or should there be cases that could justify a deviation from a measure, particulars thereof shall be submitted to the DBE, with a view to a decision regarding such application or possible deviation by the Minister of Basic Education with the concurrence of the Minister of Finance in the event of an amendment or supplementation having a financial implication, after negotiation and agreement in terms of the LRA.

A.2 NORMS/GUIDELINES FOR THE PURPOSES OF ESTABLISHMENT DETERMINATION

A.2.1 Educator personnel

- A.2.1.1 The educator post establishment of the DBE consists of the posts created by the Minister.
- A.2.1.2 The educator post establishment of a provincial department of education consists of the posts created by the MEC responsible for education in terms of the measures set out in paragraph A.2.2.

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

- A.2.1.3 The educator post establishment of an education institution or office consists of the posts allocated to such an institution or office from the educator establishment of the provincial department of education by the head of such a department. The allocation of educator posts to schools by a HoD of a provincial department of education must be done in terms of the measures set out in paragraph A.2.3.
- A.2.2 Creation of educator posts by a MEC responsible for education in a province** *(Government Gazette No 19627, dated 18 December 1998, as amended by Government Gazette No 24077, dated 15 November 2002) (Regulations regarding the terms and conditions of employment of educators (Schedule))*
- A.2.2.1 The MEC responsible for education in a province must determine the educator post establishment of the provincial department of education in terms of section 5(1)(b) of the EEA, in accordance with any applicable policy made in terms of NEPA.
- A.2.2.2 In determining the post establishment of a provincial department of education, the MEC must –
- A.2.2.2.1 Consult with the trade unions in that province which are members of the ELRC and governing body organisations which are active in that province.
- A.2.2.2.2 Take into account –
- (a) The budget of the provincial department of education.
 - (b) The effect that the post establishment will have on the employment security of educators.
 - (c) The need for redress in the implementation and promotion of curriculum policy in keeping with the basic values and principles set out in section 195 of the Constitution of the Republic of South Africa.
 - (d) The fact that the division between expenditure on personnel and non-personnel costs in the budget should be educationally and financially justifiable and in accordance with national policy that may exist in this regard.
 - (e) The fact that the division between expenditure on educator and non-educator personnel costs in the budget should be educationally, administratively and financially justifiable and in accordance with national policy that may exist in this regard.
- A.2.2.3 In determining the educator post establishment of the provincial department of education, the MEC must take into account the terms and conditions of employment of educators that may be affected by the post establishment, including provisions for leave, substitution and remuneration-related issues and may not vary any of these terms and conditions of employment.
- A.2.3 Distribution of educator posts to schools by a HoD** *(Regulations regarding the terms and conditions of employment of educators (Schedule))*

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

A.2.3.1 The HoD of a provincial department of education must, in terms of section 5(2) of the EEA, determine the educator post establishment of each public school in the province in question –

A.2.3.1.1 By applying the post distribution model set out in Annexure A.1.

A.2.3.1.2 By taking into account:

- (a) The post establishment of the provincial department of education as contemplated in paragraph A.2.2.
- (b) The need for redress in the implementation and promotion of curriculum policy. The HoD of a provincial department of education must determine an annual programme in this regard after consultation with trade union parties to the ELRC and the governing body organisations that are active in that province.

A.2.4 Post level ratio norms

A.2.4.1 The distribution of personnel, that is, the provision of “posts” on the fixed establishment over the various post levels according to the post level ratio norm, must be based on full-time incumbents.

A.2.4.2 Educators employed on a proportional basis, as well as part-time units who are paid on a per hour basis must be converted to full-time incumbent units. (This does not include full-time units remunerated for additional work.)

A.2.4.3 For the purposes of the determining of the number of “posts” on the fixed establishment, substitutes on post level 1 must not be taken into account.

A.2.4.4 The distribution of educators over post levels, including proportional appointments, must be monitored by the relevant provincial department of education every term.

A.2.4.5 The distribution of educators over the various post levels in a particular reporting year, (excluding substitutes on post level 1), must conform to the prescribed post level ratio norms.

A.2.4.6 Educators who hold lower post level gradings, but who are utilised on higher post levels and are remunerated on the higher post level must, for the purposes of the application of the formula be deemed to occupy posts on a higher level.

A.2.4.7 The post level ratio norm shown in paragraph A.2.4.8 below is the most favourable distribution of educators (incumbents/full-time equivalent units) over post levels that can be applied. This means that the provision (number of incumbents) applicable to higher post levels that are not utilised, may be used as incumbent numbers on lower post levels.

A.2.4.8

<i>Post level</i>	<i>Ratio per 1 000 educators</i>
1	697,20

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

2	182,20
3	84,50
4	34,20
5	,95
6	,95

Note: In the calculation of the number of educators at every post level, fractions must be omitted, e.g. 91.7 = 91. The fractions that are omitted must be added to the calculated provision of educators at post level 1.

A.2.5 Provision of posts of education therapist (*ELRC Resolution No. 5 of 1997*)

A.2.5.1 Post provisioning norms for special schools in respect of education therapists are additional to post provisioning in respect of other categories of educators, namely those with teaching or psychological responsibilities.

A.2.5.2 The following post provisioning norms apply in respect of education therapists:

Disability of learners	Number of posts per learner
Cerebral palsied	0,050
Physically disabled	0,040
Specifically learning disabled	0,033
Visually impaired	0,010
Hearing impaired	0,010
Epileptic	0,020
Autistic	0,033
Severely intellectually impaired	0,010

A.2.5.3 In order to determine the number of therapist posts to be provided to a school, the number of learners in each disability category is multiplied by the applicable norm in paragraph A.2.5.2. Fractions of posts, which may occur after the calculated values in respect of all the categories of disability have been added together, are ignored. However, with regard to the provision of the first and only post to a school, a fraction of 0,5 or more will be rounded to a full post, unless the department concerned is able to render the required service by means of centrally based therapists.

A.2.5.4 Each learner may only be counted once even though they may be multiple disabled. Learners who are multiple disabled are counted under the category of disability that is, for purposes of post provisioning, more favourable.

A.2.5.5 For every multiple of 5 therapist posts, one post will be a supervisory post provided that at least 3 posts should be allocated in respect of a specific discipline of therapy (speech, physio- or occupational) for the allocation of a Chief Education Therapist post in respect of such discipline. Allocation of disciplines of therapy should be done in accordance with the specific needs of the school.

A.3 GRADING OF INSTITUTIONS (*ELRC Collective Agreements No. 3 of 2006 and No. 1 of 2008*)

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

A.3.1 The salary level of a principal of a school is determined by the grading of the school, which is done in accordance with the number of educator posts allocated to a school in terms of national norms. In respect of special schools (LSEN schools) the number of educator posts allocated to a school for this purpose, includes all educator posts allocated in terms of national norms (educators and therapists).

A.3.2 The grading of a school determines the salary range of the principal as indicated in the second column of the table below, and applies to a fully qualified principal.

Educator posts on the departmental establishment of the school	Applicable salary range	Grading	Minimum posts required for up-grading	Number of posts to which the establishment must drop before the institution will be down-graded
1	Minimum notch code: 56 Maximum notch code: 138	One person school	2	-
2 – 3	Minimum notch code: 108 Maximum notch code: 186	P1	4	1
4 – 12	Minimum notch code: 126 Maximum notch code: 201	P2	13	2
13 – 24	Minimum notch code: 144 Maximum notch code: 215	P3	26	10
25 – 45	Minimum notch code: 159 Maximum notch code: 218	P4	47	22
46 +	Minimum notch code: 180 Maximum notch code: 221	P5	-	43

A.3.3 A school is up-graded to a higher grading level if, for two consecutive years, the educator post allocation to the school reaches or exceeds the number of posts required for the up-grading of the school as indicated in the table above.

A.3.4 A school is down-graded to a lower grading level if, for two consecutive years, the educator post allocation to the school drops to or below the number of posts that will effect such down-grading as indicated in the table.

A.3.5 Re-grading of schools should be done on an annual basis and should be effective from 1 January, based on the school's post establishments of the previous year and of the current year. The higher salary notch will apply from date of up-grading of the school.

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

A.3.6 Where the enrolment of a school increases or decreases substantially, affecting the post allocation to the school substantially, and sufficient evidence exists that the new enrolment and accompanying post allocation will be maintained for a reasonable period, the HoD may immediately re-grade the school in accordance with the relevant post allocation.

A.3.7 The HoD may grade a new school in accordance with the enrolment and accompanying post allocation that the school is expected to maintain for a reasonable period.

A.3.8 Measures applicable at implementation on 1 July 2005

A.3.8.1 These grading norms came into effect on 1 July 2005. All existing schools should have been graded with effect from 1 July 2005 in terms of these norms, based on the 2005 or 2006 post allocation to a school, whichever was more favourable.

A.3.8.2 Where the principal's salary was to be increased as a result of the implementation of the norms, it became effective on 1 July 2005 after implementation of the general salary adjustment and salary progression that might have taken place on the same date. An increase in a principal's salary as a result of the implementation of the new norms is not regarded as an upgrading of the post and would, therefore, not require any procedure that applies to filling of a new post or a waiting period, as is the case with the upgrading of schools.

A.3.9 Where the new norms had the effect that the salary applicable to the post was lower than the salary of the incumbent principal as on the day the agreement became effective, such a principal will retain his/her salary range for as long as the school maintains the 1 July 2005 grading. Such a principal will still be eligible for salary progression up to the maximum of his/her salary range. A subsequent grading of the school to below the level on which it was graded on 1 July 2005, will affect the principal's position in terms of the measures applicable to the re-grading of schools.

A.4 WORKLOAD OF SCHOOL-BASED EDUCATORS (*ELRC Resolution No. 7 of 1998*)

A.4.1 Introduction

A.4.1.1 These measures cover all full-time educators (including psychologists, therapists and counsellors) that are school based.

A.4.1.2 The work done by educators includes the following core duties covered during a *formal school day* (with or without contact with the learners) and outside the *formal school day*.

A.4.1.2.1 During the formal school day

- (a) Scheduled teaching time.
- (b) Relief teaching.
- (c) Extra and co-curricular duties.

- (d) Pastoral duties (ground, detention, scholar patrol, etc.).
- (e) Administration.
- (f) Supervisory and management functions.
- (g) Professional duties (meetings, workshops, seminars, conferences) etc.).
- (h) Planning, preparation and evaluation.

A.4.1.2.2 **Outside the formal school day**

- (a) Planning, preparation and evaluation.
- (b) Extra and co-curricular duties.
- (c) Professional duties (meetings, workshops, seminars, conferences).
- (d) Professional development.

A.4.1.3 Each post level within a school has different duties and responsibilities, encompassing the core duties outlined in paragraph A.4.1.2 above, but to a varying degree.

A.4.1.4 There should be an equitable distribution of workload between the various post levels and within a post level to ensure that educators on a particular level or an individual educator is not over burdened.

A.4.1.5 The expectation is that every educator must be able to account for 1800 actual working hours per annum.

A.4.2. **Workload per educator**

A.4.2.1 All educators should be at school during the *formal school day*, which should not be less than 7 hours per day, except for special reasons and with the prior permission of the principal. The principal will exercise his/her discretion in this regard based on provincial policy.

A.4.2.2 The 7 hours per day includes the breaks and the period/s in which the learners are not at school.

A.4.2.3 *Scheduled teaching time* during the *formal school day* will be specified with time allocation per post level. The principal must determine the allocation of subjects, timetable and resultant scheduled teaching time after consultation with the educator staff.

A.4.2.4 All other duties are specified and allocated by the principal after consultation with the educator staff. Educators will be expected to perform the core duties, as outlined in paragraph A.5.2, both within and outside of the *formal school day*, and with the understanding that none of these may diminish the overall amount of *scheduled teaching time* or negatively impact upon the curriculum.

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

A.4.2.5 An educator shall, during his/her official duty, give his/her full attention to the duties entrusted to him/her and shall not without the consent of the head of the relevant institution or office be absent from his/her school or institution during his/her hours of official duty. (*Regulation 23, Regulations regarding the terms and conditions of employment in education*)

A.4.2.6 All educators may be required by the employer to attend programmes for ongoing professional development, up to a maximum of 80 hours per annum. These programmes must be conducted outside the *formal school day* or during the vacations. The employer shall give at least one term notice of programmes to be conducted during the school vacations.

A.4.3 Scheduled teaching time per post level

A.4.3.1 The time allocated for teaching in respect of different post levels will differ according to the size of the school. In smaller schools principals and their deputy principals are required to do more teaching than in large schools with bigger staff establishments. The actual hours must therefore be established in relation to the curriculum needs of the school, the timetable and staff establishment of the school. Scheduled teaching time is expressed as a percentage of the total time that learners in the particular grades are required to be taught.

A.4.3.2 The allocation of *scheduled teaching time* should be done in such a manner that it:-

A.4.3.2.1 Maximises the individual abilities of all educators.

A.4.3.2.2 Optimises teaching and learning at the institutional level.

A.4.3.3 In general terms, the following may be considered as guidelines in determining the *scheduled teaching time*:-

Primary School	Ratio per 1 000 educators
Post level 1	Between 85% and 92%
Post level 2	Between 85% and 90%
Deputy Principal	60%
Principal	Between 10% and 92%, depending on his/her post level NB. Principals of one-person schools are expected to teach 100% of the scheduled teaching time.

Secondary School	Ratio per 1 000 educators
Post level 1	Between 85% and 90%
Post level 2	85%
Deputy Principal	60%
Principal	Between 5% and 60% depending on his/her post level

A.5 DUTIES AND RESPONSIBILITIES OF EDUCATORS (*ELRC Resolution No. 8 of 1998*)**A.5.1 Introduction**

A.5.1.1 The ability of our education system to compete in an increasingly global economy depends on our ability to prepare both learners and educators for new or changing environments. This is in line with the mission in the corporate plan of the DBE to ensure that all South Africans receive flexible life-long learning and education and training of high quality.

A.5.1.2 Management in education should be able to draw on the professional competencies of educators, build a sense of unity of purpose and reinforce their belief that they can make a difference. When and where appropriate, authorities need to allocate authority and responsibility that will ensure the building of human resource capacity.

A.5.1.3 In addition to the core duties and responsibilities specified in this section, certain specialised duties and responsibilities may be allocated to staff in an equitable manner by the appropriate representative of the employer.

A.5.2 Core duties and job descriptions

Refer to the following annexure:

Annexure A.2:	Core duties and responsibilities: Teacher
Annexure A.3:	Core duties and responsibilities: Senior Teacher
Annexure A.4:	Core duties and responsibilities: Master Teacher
Annexure A.5:	Core duties and responsibilities: Departmental Head
Annexure A.6:	Core duties and responsibilities: Deputy Principal
Annexure A.7:	Core duties and responsibilities: Principal
Annexure A.8:	Core duties and responsibilities: Office-based educators

Annexure A.1**POST DISTRIBUTION MODEL FOR THE ALLOCATION OF EDUCATOR POSTS TO SCHOOLS** *(Government Gazette No 19627, dated 18 December 1998, as amended by Government Gazette No 24077, dated 15 November 2002, as amended in 2008 per CEM decision (inclusion of new subjects))***PRINCIPLES ON WHICH THE MODEL IS BASED**

The model is based on the principle that available posts are distributed among schools, proportionally to their number of weighted learners.

The concept of “weighted learner”, instead of actual learner, is used to enable schools to compete on an equal footing for posts. As some learners and some learning areas require more favourable post allocations than others, each learner is given a certain weighting that reflects its relative need in respect of post provisioning. Other factors like the size of the school, the need to redistribute resources and the need to ensure equal access to the curriculum may require that additional weighted learners be allocated to some schools. A weighted learner enrolment for each school is determined, which, in relation to the total learner enrolment of the province, reflects its relative claim to the total pool of available posts in the province.

FACTORS THAT ARE BEING TAKEN INTO ACCOUNT IN DETERMINING THE POST PROVISIONING NEEDS OF SCHOOLS AND LEARNERS

Educational and administrative factors that impact differently on the post provisioning needs of learners and of schools for which specific provision is made in the model are the following:

- ❑ The maximum ideal class size applicable to a specific learning area or phase. This ideal maximum value also takes into account complicating factors that may apply, such as additional contact time required between educator and learner and the requirement to attend to learners in more than one place at the same time. Although the situation in South Africa is such that ideal maximum class sizes cannot be complied with, these ideal values form a basis of comparison between the requirements of all the learning areas and grades.
- ❑ Period load of educators. It is common practice that educators in the secondary school phases have a lower period load than educators in the primary school phases. This is mainly as a result of more complex time tables and subject combinations. A lower period load implies a more favourable overall learner-educator ratio. The norms used in this regard are based on average prevailing practices and do not represent workload policy.
- ❑ Need to promote a learning area. By providing a more favourable learner-educator ratio in respect of a learning area in grades 10 to 12, schools can be motivated to promote such a learning area. This may only be done in terms of national or provincial policy in this regard.
- ❑ The size of the school. The smaller a school, the more difficult it is to manage with a certain learner-educator ratio and the more favourable it should be. This matter is addressed by adding a certain constant number of weighted learners to each school. The constant additional number of weighted learners could be seen as providing for a school’s principal post, or for part of it, independently from the number of learners. It could also be seen as providing for posts to deal with certain basic responsibilities that each school has, irrespective of its size.

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

- The number of grades. Especially in respect of smaller schools, it is more complex to manage a school with a relatively large number of grades than a similar sized school with only a few grades. This matter is addressed by linking the additional number of weighted learners, referred to under the previous point, to the number of grades. A further increase in the number of weighted learners of a combined school is required to compensate for the management complexity of such a school.
- More than one language medium of instruction. In order to deal with this complicating factor, the number of weighted learners that is granted per grade in terms of the previous point, is increased if more than one language medium of instruction is used in the particular grade. A HoD may set a certain minimum number or percentage of the learners in a grade that must receive tuition in a second language before recognition is given in this way.
- Disabilities of learners. These learners require additional support from various categories of personnel. Norms with regard to the provisioning of educator posts, including teaching staff, therapists and psychologists still need to be determined. Until new norms have been determined, the norms for the allocation of educator (teaching staff) posts that applied in terms of the 1998 Post Provisioning Model, as published in Government Gazette No. 119627 on 18 December 1998, as well as the norms that applied in respect of therapist and psychologist posts, will continue to apply except in schools where the allocation is done in terms of a field testing of norms that are in the process of being developed. The weightings that apply to learners for purposes of allocating educator posts in terms of the Post Distribution Model are as follows:

Specifically Learning Disabled	3.0
Severely Intellectually Impaired	3.0
Epileptic	3.0
Cerebral Palsied	4.0
Physically Disabled	4.0
Severe Behaviour Problems	5.0
Hard of Hearing	5.0
Partially sighted	5.0
Blind	5.0
Deaf	5.0
Autistic	6.0

In accordance with specific circumstances in a department, each of the above weightings may be increased, after consultation with trade unions who are members of the ELRC, by between 0% and 20%. It is important to note that the weightings that apply to learners based on their curriculum, school phase, instruction media or the fact that both primary and senior secondary phases are provided for, do not apply to these learners.

Learners who are mildly to moderately learning disabled are weighted in terms of the curriculum they follow and not in terms of their disability. If they are accommodated in so-called special schools where they receive vocational training, they are counted as 2.5 weighted learners each.

- Access to the Curriculum. In order to ensure affordable and fair access of learners to the curriculum, the numbers of learners that are fully funded in respect of subjects that are more expensive to offer need to be regulated. (Certain subjects are more expensive than others because they require smaller classes and/or special equipment and facilities.) A HoD, therefore, may identify specific schools at which the offering of such subjects should take

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

place as well as the maximum number of learners at such schools that should take the subjects concerned. This means that a maximum number (or percentage) of learners may be set in respect of a particular subject at a particular school. Should a school exceed such a limit, the excess learners will be funded in terms of the norms applicable to the least expensive subject. It is possible that the maximum number of learners that will be counted as taking a particular subject at a particular school may be specified as zero even though such a subject was considered for post provisioning purposes in the past. This would mean that all such learners taking such a subject would be counted as if they are taking the least expensive subject for purposes of post provisioning.

In order to assist a school to introduce such a subject, a certain minimum number of learners may be counted for post provisioning purposes during a phasing in period, even though the actual number of learners taking the subject is lower than this number. The implementation of these measures must be in accordance with a department's policy on redress in the implementation and promotion of the curriculum.

- Poverty. In order to compensate for the negative impact that poverty has on learning, the poverty grading of a school is also taken into account.
- Level of funding. Policy may require that different phases be funded at different levels. Currently, all grades are set at a 100% funding level while Grade R is set at a funding level of 0%. This is merely a tool that could be used if and when required.
- Ad Hoc factors. Certain factors that are not considered above, such as an unexpected growth in learner numbers, may exist at a particular school and may justify the allocation of additional posts to such a school. These posts must be allocated from an additional pool of posts that need to be created for this purpose.

WEIGHTING NORMS

The following norms and principles will apply in respect of all learners:

- (a) Grades 1 to 9:

Based on the principle that uniform curricula apply to learners in schools in all phases up to grade 9, the following formula is used to determine the weighting of a learner:

c divided by the ideal maximum class size, divided by the average prevailing period load, multiplied by the funding level.

$$(w = c/m/l \times f)$$

The value of c is set at 40 and refers to the highest ideal maximum class size in relation to which others are expressed.

Grade	Max Class size	Period load (%)	Funding level	Weight
	(m)	(l)	(f)	(w)
R	35	96	0	0
1 to 4	35	96	100	1,190
5 to 6	40	96	100	1,042
7	37	96	100	1,126

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

8 to 9	37	87	100	1,2426

(b) Grades 10 to 12:

- In view of the variety of learning areas, each learner is weighted separately in terms of his or her curriculum.
- A total number of weighted learners (subject-learner weight or slw) is determined for the learners in a particular grade (10, 11 or 12) taking a particular subject by means of the following formula:

The number of learners taking the subject (l_s), multiplied by 40, divided by the ideal maximum class size, multiplied by the promotion factor (p), divided by the average period load (l), multiplied by the funding level (f), multiplied by the relevant weekly time allocation (t), divided by 27,5.

$$(slw = l_s \times 40/m \times p/l \times f \times t / 27,5)$$

In view of the fact that some subjects are compulsory for all learners and others may be limited in respect of the number of learners that will be recognized for post provisioning purposes, the following procedure needs to be followed:

- All learners are required to take 4 subjects from Group A as follows: 2 official languages, Mathematics or Mathematical Literacy and Life orientation. Therefore, the total weighting of all learners in a particular grade (l_g) in respect of the subjects in Group A is:

$$wl(A) = (2 \times (40/37 \times 1/0.84 \times 4.5/27.5) + (40/35 \times 1/0.84 \times 4.5/27.5) + (40/37 \times 1/0.84 \times 2/27.5)) \times l_g$$

$$= 0,7374 \times l_g$$

- In respect of Group B subjects, each learner may take any 3 subjects. Therefore, the maximum number of learner-subject combinations in respect of the various subjects in Group B (n_m), in respect of a particular grade in a school is 3 times the actual number of learners in that grade ($3 \times l_g$). The calculation of the total weighting of learners in a particular grade in respect of Group B subjects is done as follows:

In respect of each subject listed under Group B (excluding "all other Group B subjects"), calculate the weighted learners by means of the formula $slw = 40/m \times p/l \times f \times t/27,5 \times$ number of learners taking the subject. By adding the values of swl for all these subjects a value for $swl(1)$ is obtained.

If the total number of subject-learner combinations (n_t) used for the calculation in (a) is less than the maximum number of subject-learner combinations (n_m) that can apply, determine the value of $n_d = n_m - n_t$.

$$\text{Calculate } slw(2) = n_d \times 40/37 \times 1/0,84 \times 4/27,5 = n_d \times 0.1872.$$

The total number of weighted learners for the grade in respect of Group B subjects is $slw(B) = slw(1) + slw(2)$.

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

If the total number of learner-subject combinations (n_i) used for the calculation in (a) is higher than the maximum number of learners (n_m) that can apply, adjust the value $swl(1)$ calculated in (a) above by multiplying it with n_d/n_m to obtain a value for $wl(B)$.

A total number of weighted learners for the particular grade is then determined as $wl(A) + wl(B)$.

The following norms apply:

Subject	Ideal (m)	Promot (p)	Period (l)	Time (t)	Funding (f)
Group A					
Official languages	37	1	84	4,5	100
Mathematics or Mathematical Literacy	35	1	84	4,5	100
Life Orientation	37	1	84	2,0	100
Group B					
Agricultural Management Practices	15	1	84	4	100
Agricultural Technology	15	1	84	4	100
Agricultural Science	37	1	84	4	100
Dance Studies	15	1	84	4	100
Design	12	1	84	4	100
Dramatic Arts	12	1	84	4	100
Music	6	1	84	4	100
Visual Arts	12	1	84	4	100
Civil Technology	15	1	84	4	100
Electrical Technology	20	1	84	4	100
Mechanical Technology	15	1	84	4	100
Engineering Graphics and Design	15	1	84	4	100
Computer Applications Technology	25	1	84	4	100
Information Technology	25	1	84	4	100
Life Sciences	32	1	84	4	100
Physical Sciences	30	1	84	4	100
Consumer Studies	25	1	84	4	100
Hospitality Studies	20	1	84	4	100
All other Group B subjects	37	1	84	4	100

Note: The values that appear in the table as promotion factors are all set as 1. This means that no provision is made in the table for the promotion of any of these subjects. Should provision be made in policy that a certain subject should be promoted by, say 7%, the value of “1” would become “1,07”. The promotion factor per subject should be included in the provincial curriculum policy and would apply equally to all learners counted in the subject.

- (c) A further distinction between schools is made based on the size of the school, the number of grades and whether or not more than one language medium of instruction is used. Provision for this is made by adding a certain number of weighted learners to a school's weighted enrolment linked to each recognized language group (maximum of 2 language groups) and each grade provided for at the school. The following values apply:

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

A base number of weighted learners must be added to each school. Any value from 10 to 20, in accordance with a department's needs in this regard, will apply. A head of a provincial department must select a value that will ensure a proper balance in the allocation of posts to institutions of different sizes.

Additional weighted learners must be added in respect of each grade in which learners are enrolled. If learners in a particular grade are taught in more than one language medium, a further additional weighting will apply in respect of that grade. (A minimum number (or percentage) of learners in a particular grade receiving tuition in a second language may be specified before the additional provision applies. This additional weighting only applies once, irrespective of the number of additional languages that may apply):

Grades	1	2	3	4	5	6	7	8	9	10	11	12
Primary language group	2	2	2	2	2	2	2	3	3	3	3	3
Second language group	4	4	4	4	4	4	4	6	6	6	6	6

Any of the values in the table may be increased by a maximum of 2, provided that the head of a provincial department is satisfied that such an increase would lead to a more equitable allocation of posts.

In respect of a combined school, the base number of 10 to 20 weighted learners that is granted to a school in terms of paragraph (c), is granted in respect of both the primary school phase and the secondary school phase that the school has. For this purpose the secondary school phase must include learners in any of grades 10 to 12.

- (a) The total number of weighted learners in each school is then adjusted in terms of its poverty ranking.

The head of a provincial department must set aside a certain percentage of its available posts for poverty redress based on the department's relative level of internal inequality. The Minister may from time to time set the maximum percentage that provincial departments may use for this purpose. Until this limit is revised, it is set at 5%.

The redress posts are to be distributed to schools based on the relative poverty of the learners of a school, using an appropriate index within the framework of the indices utilized by the province in the National Norms and Standards for School Funding. The basis on which the redress posts are to be distributed among schools is as follows:

School quintiles	Allocation from redress pool or posts
Poorest 20%	30% of posts
Next 20%	27.5% of posts
Next 20%	22.5% of posts
Next 20%	15% of posts
Least poor 20%	5% of posts

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

After the total number of weighted learners for each school has been determined, the number of posts to be allocated to a school is determined by means of the following formula:

Posts = Total number of posts available, multiplied by weighted learners of school,
divided by total weighted learners of all schools.

COMMUNICATION OF NEW POST ESTABLISHMENTS WITH SCHOOLS

Where a school's establishment is likely to change in any school year, the adjusted post establishment should, as far as possible, be communicated to the school on or before 30 September preceding the school year.

ROLE OF THE DBE

Provincial departments are required to adhere to the intent and spirit of these norms. Where a province deviates from any of these norms it needs to justify such deviation to the DBE. The DBE may require information from time to time from provinces in order to ensure that these norms are being implemented. Provinces are thus required to comply with these requests.

Annexure A.2**1. TEACHER**

JOB TITLE: Educator - public school

RANK: Teacher

POST LEVEL: 1

2. THE AIM OF THE JOB

To engage in class teaching, including the academic, administrative, educational and disciplinary aspects and to organise extra and co-curricular activities so as to ensure that the education of the learners is promoted in a proper manner.

3. CORE DUTIES AND RESPONSIBILITIES OF THE JOB

The duties and responsibilities of the job are individual and varied, depending on the approaches and needs of the particular school, and include, but are not limited to, the following:

3.1 Teaching

3.1.1 To engage in class teaching which will foster a purposeful progression in learning and which is consistent with the learning areas and programmes of subjects and grades as determined.

3.1.2 To be a class teacher.

3.1.3 To prepare lessons taking into account orientation, regional courses, new approaches, techniques, evaluation, aids, etc. in their field.

3.1.4 To take on a leadership role in respect of the subject, learning area or phase, if required.

3.1.5 To plan, co-ordinate, control, administer, evaluate and report on learners' academic progress.

3.1.6 To recognise that learning is an active process and be prepared to use a variety of strategies to meet the outcomes of the curriculum.

3.1.7 To establish a classroom environment which stimulates positive learning and actively engages learners in the learning process.

3.1.8 To consider and utilise the learners' own experiences as a fundamental and valuable resource.

3.2 Extra- & co-curricular

3.2.1 To assist the departmental head to identify aspects which require special attention and to assist in addressing them.

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

3.2.2 To cater for the educational and general welfare of all learners in his/her care.

3.2.3 To assist the principal in overseeing learner counselling and guidance, careers, discipline and the general welfare of all learners.

3.3 Administrative

3.3.1 To co-ordinate and control all the academic activities of each subject taught.

3.3.2 To control and co-ordinate stock and equipment which is used and required.

3.3.3 To perform or assist with one or more of other non-teaching administrative duties such as:

3.3.3.1 Secretary to general staff meeting and/or others.

3.3.3.2 Fire drill and first aid.

3.3.3.3 Timetabling.

3.3.3.4 Collection of fees and other monies.

3.3.3.5 Staff welfare.

3.3.3.6 Accidents.

3.4 Interaction with stakeholders

3.4.1 To participate in agreed school/educator appraisal processes in order to regularly review their professional practice with the aim of improving teaching, learning and management.

3.4.2 To contribute to the professional development of colleagues by sharing knowledge, ideas and resources.

3.4.3 To remain informed of current developments in educational thinking and curriculum development.

3.4.4 To participate in the school's governing body if elected to do so.

3.5 Communication

3.5.1 To co-operate with colleagues of all grades in order to maintain a good teaching standard and progress among learners and to foster administrative efficiency within the school.

3.5.2 To collaborate with educators of other schools in organising and conducting extra and co-curricular activities.

3.5.3 To meet parents and discuss with them the conduct and progress of their children.

PERSONNEL ADMINISTRATIVE MEASURES (PAM)

- 3.5.4 To participate in departmental committees, seminars and courses in order to contribute to and/or update one's professional views/standards.
- 3.5.5 To maintain contact with sporting, social, cultural and community organisations.
- 3.5.6 To have contacts with the public on behalf of the principal.

NOTICE NO. 2432 OF 1998

GG 19377 (19 October 1998)

DEPARTMENT OF EDUCATION

NATIONAL EDUCATION POLICY ACT, 1996 (ACT NO. 27 OF 1996)

ADMISSION POLICY FOR ORDINARY PUBLIC SCHOOLS

The Minister of Education, after consultation with each Member of the Council of Education Ministers, hereby give notice in terms of section 3(4)(i) of the National Education Policy Act, 1996 (No. 27 of 1996) of the admission policy for learners to ordinary public schools, as set out in the Schedule.

MINISTER OF EDUCATION

DATE:

SCHEDULE

ADMISSION POLICY FOR ORDINARY PUBLIC SCHOOLS

Interpretation

1. In this policy any expression to which a meaning has been assigned in the National Education Policy Act, 1996 (Act No. 27 of 1996) and the South African Schools Act, 1996 (Act No. 84 of 1996), has that meaning.

Scope

2. This policy, read with the age requirement for admission to ordinary public schools, published in the same government notice, applies uniformly in all provincial departments of education and ordinary public schools.
3. The admission policy of an ordinary public school must be consistent with this policy.

Purpose

4. The purpose of this policy is to provide a framework to all provincial departments of education and governing bodies of public schools for developing the admission policy of the school.

Administration of admissions

5. The Head of Department must determine a process of registration for admission to public schools in order to enable the admission of learners to take place in a timely and an efficient manner. The Head of Department and the school governing bodies should encourage parents¹⁾ to apply for the admission of their children before the end of the preceding school year.
6. The Head of Department is responsible for the administration of the admission of learners to a public school. The Head of Department may delegate the responsibility for the admission of learners to a school to officials of the Department.
7. The admission policy of a public school is determined by the governing body of the school in terms of section 5(5) of the South African Schools Act, 1996 (No. 84 of 1996). The policy must be consistent with the Constitution of the Republic of South Africa, 1996 (No. 108 of 1996), the South African Schools Act, 1996 and applicable provincial law. The governing body of a public school must make a copy of the school's admission policy available to the Head of Department.
8. The Head of Department must co-ordinate the provision of schools and the administration of admissions of learners to ordinary public schools with governing bodies to ensure that all eligible learners are suitably accommodated in terms of the South African Schools Act, 1996. Subject to this policy, it is particularly important that all eligible learners of compulsory school going age are accommodated in public schools.
9. The admission policy of a public school and the administration of admissions by an education department must not unfairly discriminate in any way against an applicant for admission.
10. A learner is admitted to the total school programme and may not be suspended from classes, denied access to cultural, sporting or social activities of the school, denied a school report or transfer certificates, or otherwise victimised on the grounds that his or her parent -
 - (a) is unable to pay or has not paid the required school fees;
 - (b) does not subscribe to the mission statement and code of conduct of the school; or
 - (c) has refused to enter into a contract in terms of which the parent waives any claim for damages arising out of the education of the learner.
11. The governing body of a public school may not administer any test relating to the admission of a learner to a public school, or direct or authorise the principal of the school or any person to administer such a test. Where placement in a specific course or programme, e.g. technical field of study, dance or music, is required and where it would be in the educational interest of a learner, he or she may be requested by the

1) "parent" means-

- (a) the parent or guardian of a learner;
- (b) the person legally entitled to custody of a learner; or

- (c) the person who undertakes to fulfil the obligations of a person referred to in paragraphs (a) and (b) towards the learner's education at school.

Head of Department to undertake a suitable test to assist a placement decision.

12. The name of a learner must be removed from a school's admission register when the learner-
- (a) leaves the school after grade 12 or after completing the compulsory school attendance period, or is granted exemption from compulsory attendance according to section (4) of the South African Schools Act;
 - (b) applies for a transfer to another school and the transfer is effected;
 - (c) is expelled from school; or
 - (d) dies.
13. If a learner of compulsory school going age fails to attend school, the Head of Department may act in terms of section 3(5) and (6) of the South African Schools Act, 1996.

Documents required for admission of a learner

14. A parent must complete an application form for admission, which should be made available to him or her by the principal of the school together with the admission policy and the code of conduct for learners of the school. The principal must ensure that parents are given whatever assistance they may require to complete the form.
15. When a parent applies for admission of a learner to an ordinary public school, the parent must present an official birth certificate of the learner to the principal of the public school. If the parent is unable to submit the birth certificate, the learner may be admitted conditionally until a copy of the birth certificate is obtained from the regional office of the Department of Home Affairs. The principal must advise parents that it is an offence to make a false statement about the age of a child. (See Births and Deaths Registration Act, 1992 (No. 51 of 1992).) The parent must ensure that the admission of the learner is finalised within three months of conditional admission.
16. On application for admission, a parent must show proof that the learner has been immunised against the following communicable diseases: polio, measles, tuberculosis, diphtheria, tetanus and hepatitis B. If a parent is unable to show proof of immunisation, the principal must advise the parent on having the learner immunised as part of the free primary health care programme.
17. When a learner transfers from one public school to another, the principal must complete a transfer card and hand it to the parent, or forward it to the principal of the receiving school. The learner's transfer

card must be attached to the application form for admission to the receiving school.

18. If the transfer card is not available the principal of the receiving school may admit the learner and place the learner in a grade on the basis of the following documentation:
 - (a) the last report card issued by the previous school;
 - (b) other equivalent documentation from the previous school; or
 - (c) a written affidavit of the parent stating the reason for not having the transfer card and the grade the learner attended at the previous school.

Admission of non-citizens

19. The South African Schools Act, 1996 and this policy apply equally to learners who are not citizens of the Republic of South Africa and whose parents are in possession of a permit for temporary or permanent residence issued by the Department of Home Affairs.
20. A learner who entered the country on a study permit must present the study permit on admission to the public school.
21. Persons classified as illegal aliens must, when they apply for admission for their children or for themselves, show evidence that they have applied to the Department of Home Affairs to legalise their stay in the country in terms of the Aliens Control Act, 1991 (No. 96 of 1991).

Learners with special education needs

22. The rights and wishes of learners with special education needs, must be taken into account at the admission of the learners to an ordinary public school. The South African Schools Act, 1996 requires ordinary public schools to admit learners with special education needs, where this is reasonably practical. Schools are encouraged to make the necessary arrangements, as far as practically possible, to make their facilities accessible to such learners.
23. Where the necessary support which would facilitate the integration of a learner in a particular educational context, cannot be provided, the principal of the school must refer the application for admission to the Head of Department to have the learner admitted to a suitable public school in that province or to a school in another province.
24. Before the Head of Department refers a learner as contemplated in paragraph 23, the Head of Department must arrange for consultation with parents, educators and other support personnel concerned. These consultations must form part of the assessment of the learner before the learner is referred to another public school. This process should be handled as a matter of urgency to facilitate the admission of a learner as soon as possible to ensure that the learner is not prejudiced in receiving appropriate education.

25. Assessment and consultation relating to a change of placement must be carried out by a team based at the school in consultation with parents, educators and other relevant support personnel. The Head of Department of the province concerned must approve the placement.

Age requirements for the admission of a learner to an ordinary public school or different grades of a school

26. Learners are to be admitted to public schools and placed in different grades in the school according to Government Notice No. of 1998.
27. If a learner has been admitted to a public school at an age above the age norm for a grade, such learner must, as far as possible, be placed in a fast track facility, or with his or her peer group, unless it is not in the educational interest of the learner. In the latter case the learner must be placed in a suitable lower grade, and an accelerated programme must be worked out for the learner to enable him or her to catch up with the peer group as soon as possible.
28. The age-grade norm does not apply to a learner who is already enrolled at a public school on 1 January 2000, except that paragraph 27 may apply if it is deemed to be in the best interests of the learner.
29. A learner who is 16 years of age or older and who has never attended school and who is seeking admission for the first time or did not make sufficient progress with his or her peer group, must be advised to enroll at an Adult Basic Education and Training (ABET) centre.

Repetition

30. A learner who has repeated one or more years at school in terms of this policy is exempt from the age grade norm, except that, if a learner is three years older than the norm age per grade, the Head of Department must determine whether the learner will be admitted to that grade.
31. In principle, learners should progress with their age cohort. Repetition of grades seldom results in significant increases in learning attainment and frequently has the opposite result. The norm for repetition is one year per school phase where necessary. Multiple repetition in one grade is not permissible.
32. The norm is not to be construed as promoting the practice of automatic promotion. A learner's needs must be attended to through the efforts of the learner, and his or her teachers, with support from the learner's family and peers.

School zoning

33. A Head of Department, after consultation with representatives of governing bodies, may determine feeder zones for ordinary public

schools, in order to control the learner numbers of schools and co-ordinate parental preferences. Such feeder zones need not be geographically adjacent to the school or each other.

34. If a feeder zone is created-
- (a) preference must be given to a learner who lives in the feeder zone of a school or who resides with his or her parents at an employer's home in the feeder zone;
 - (b) a learner who lives outside the feeder zone is not precluded from seeking admission at whichever school he or she chooses. However, access to a chosen school cannot be guaranteed;
 - (c) a learner who lives within the feeder zone of a school A must be referred to the neighbouring school B, if school A is oversubscribed. If school B is oversubscribed, an alternative school within a reasonable distance must be found by the Head of Department. If that is not possible, school A must admit the learner;
 - (d) the preference order of admission is:-
 - (i) learners whose parents live in the feeder zone, in their own domicile or their employer's domicile;
 - (ii) learners whose parent's work address is in the feeder area; or
 - (iii) other learners: first come first served.
35. A school with a specific field of study, e.g. a technical school, must have much larger feeder zones to accommodate learners with specific aptitudes, interests or needs.

Register of admission

36. The principal of a public school must keep a register of admission to the school. All admissions of learners to the school must be recorded in the register of admission. The register must contain the name, date of birth, age, identity number, if applicable, and address of the learner as well as the names of the learner's parents as defined in the South African Schools Act, 1996 (see footnote 1) and their addresses and telephone numbers, where applicable.
37. Entries in the register of admission must be verified against the birth certificate or identity document of the learner concerned.
38. Officials of the provincial education department must have access to the register of admission.

Rights and obligations of parents

- 39. The governing body of a school must inform all parents of learners admitted to a school of their rights and obligations in terms of the South African Schools Act, 1996, any applicable provincial law. Parents must specifically be informed about their rights and obligations in respect to the governance and affairs of the school, including the process of deciding the school budget, any decision of a parent meeting relating to school fees, and the Code of Conduct for Learners
- 40. Parents have an obligation to support their children to attend school regularly.

Home education

- 41. A parent who wishes to provide home education for his or her child must apply to the Head of Department for registration.
- 42. The Head of Department will register such a learner if he or she is satisfied that the conditions stipulated in section 51 of the South African Schools Act, 1966, are complied with.

Right of appeal

- 43. Any learner or parent of a learner who has been refused admission to a public school may appeal against the decision to the Member of the Executive Council in terms of section 5(9) of the South African Schools Act, 1996.



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL POLICY PERTAINING TO THE PROGRAMME AND PROMOTION REQUIREMENTS OF THE NATIONAL CURRICULUM STATEMENT

GRADES R - 12

National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R – 12 published as Government Notices No. 1115 and 1116 in Government Gazette No. 36042 of 28 December 2012 and amended as:

Government Notices 499 and 500 in Government Gazette, No. 36465 dated 17 May 2013;

Government Notices 564 in Government Gazette, No. 37840 dated 18 July 2014;

Government Notices 625 and 626 in Government Gazette, No. 37910 dated 13 August 2014;

Government Notices 236 and 237 in Government Gazettes, No. 38950 dated 20 March 2015.

Government Notices 1161 in Government Gazette, No. 39435 dated 20 November 2015.

CONTENTS

ABBREVIATIONS AND ACRONYMS	vii
GENERAL EXPLANATORY NOTE	viii
DEFINITIONS	ix
CHAPTER 1: INTRODUCING THE POLICY FOR THE PROGRAMME AND PROMOTION REQUIREMENTS OF THE NATIONAL CURRICULUM STATEMENT GRADES R - 12	1
1. PURPOSE OF THE DOCUMENT	1
2. THE GROUPING OF SUBJECTS LISTED IN THE NATIONAL CURRICULUM STATEMENT GRADES R -12	2
CHAPTER 2: GENERAL REQUIREMENTS OF THE GENERAL EDUCATION AND TRAINING BAND, GRADES R – 9	3
3. DURATION	3
4. CONCESSIONS	3
CHAPTER 3: FOUNDATION PHASE, GRADES R - 3	6
5. APPROVED SUBJECTS	6
6. PROGRAMME REQUIREMENTS FOR GRADES R - 3	8
7. PROGRESSION REQUIREMENTS FOR GRADES R - 3	9
8. ASSESSMENT	11
9. RECORDING AND REPORTING	11
10. TIME ALLOCATION	12

CHAPTER 4: INTERMEDIATE PHASE, GRADES 4 - 6	14
11. APPROVED SUBJECTS	14
12. PROGRAMME REQUIREMENTS FOR GRADES 4 - 6	16
13. PROVISOS	17
14. PROGRESSION REQUIREMENTS FOR GRADES 4 - 6	18
15. ASSESSMENT	19
16. RECORDING AND REPORTING	19
17. TIME ALLOCATION	20
CHAPTER 5: SENIOR PHASE, GRADES 7 - 9	22
18. APPROVED SUBJECTS	22
19. PROGRAMME REQUIREMENTS FOR GRADES 7 - 9	25
20. PROVISOS	26
21. PROMOTION REQUIREMENTS FOR GRADES 7 - 9	27
22. ASSESSMENT	28
23. RECORDING AND REPORTING	29
24. TIME ALLOCATION	30
CHAPTER 6: FURTHER EDUCATION AND TRAINING: GRADES 10 - 12	31
25. DURATION	31
26. ENTRANCE REQUIREMENTS FOR FURTHER EDUCATION AND TRAINING, GRADES 10-12	31
26A STUDY PATHWAYS FOR GRADES 10-12	32
27. PROGRAMME REQUIREMENTS FOR GRADES 10 – 12	33
28. PROVISOS	35
29. PROMOTION REQUIREMENTS FOR GRADES 10 - 12	39
30. ASSESSMENT IN GRADES 10 AND 11	40
31. ASSESSMENT IN GRADE 12	41
32. RECORDING AND REPORTING	41
33. CONCESSIONS	42

34.	A NATIONAL SENIOR CERTIFICATE WITH ENDORSEMENT FOR LEARNERS WHO EXPERIENCE BARRIERS TO LEARNING	45
35.	CHANGING SUBJECTS IN GRADES 10, 11 AND 12	49
36.	TIME ALLOCATION	50
37.	CERTIFICATION REQUIREMENTS	51
38.	SUPPLEMENTARY EXAMINATIONS	53
CHAPTER 7: REPEAL OF POLICY AND TRANSITIONAL ARRANGEMENTS		54
39.	REPEAL OF POLICY	54
40.	TRANSITIONAL ARRANGEMENTS	55
41.	SHORT TITLE AND COMMENCEMENT	57
ANNEXURE A: APPROVED SUBJECTS LISTED IN TERMS OF THE ORGANISING FIELDS OF THE NQF		58
ANNEXURE B: APPROVED SUBJECTS THAT COMPLY WITH THE PROGRAMMEREQUIREMENTS OF GRADES 10 – 12		59
ANNEXURE C: RECOGNITION OF SUBJECTS NOT LISTED IN THE NATIONAL CURRICULUM STATEMENT GRADES R-12		65
ANNEXURE D: SUBJECT CODING FOR ASSESSMENT PURPOSES		68

ABBREVIATIONS AND ACRONYMS

GET	General Education and Training
FET	Further Education and Training
LOLT	Language of Learning and Teaching
NCS	National Curriculum Statement
NQF	National Qualifications Framework
NSC	National Senior Certificate
SAQA	South African Qualifications Authority

DEFINITIONS

“assessment body” – means an assessment body as defined in the *General and Further Education and Training Quality Assurance Act, 2001 (Act No. 58 of 2001)*;

“candidate” - means a learner who has enrolled in his or her Grade 12-year of the National Senior Certificate programme and who has registered for the National Senior Certificate final examinations;

“certification” – means the formal recognition of a qualification or part qualification awarded to a successful learner;

“condonation” – means the relaxation of promotion requirements as contemplated in *paragraph 29(1)(b)* of this document;

“Curriculum and Assessment Policy Statements” - means the policy documents stipulating the aim, scope, content and assessment for each subject listed in the *National Curriculum Statement Grades R – 12*;

“Department of Basic Education”- means the national department responsible for basic education, Grades R-12;

“Deaf learner” – means a learner who is either in a special school in terms of *section 5(6)* of the *South African Schools Act, 1996 (Act No. 84 of 1996)*, or in an ordinary school where he or she has been assessed and verified by a registered health professional as Deaf. Such a Deaf learner may, in terms of *section 6(4)* of the *South African Schools Act, 1996*, offer South African Sign Language, which has the status of an official language for the purposes of learning, as a language of learning and teaching in lieu of the second required official language;

“evidence of learner performance” - means the learner’s work that is used to compile his or her internal assessment mark;

“examination” – means the conduct of an end-of-term and/or once-off end-of-year assessment;

“external assessment” – means any assessment activity, instrument or programme where the design, development and implementation has been initiated, directed and, coordinated by Provincial Education Departments and the Department of Basic Education either collectively or individually;

“First Additional Language level” – means the language proficiency level that reflects the basic intercultural and interpersonal communication skills needed in social situations and the cognitive academic skills essential for learning across the curriculum. The First Additional Language level can be used as the language of teaching and learning from the Intermediate Phase onwards;

“full-time candidate” - means a candidate who has enrolled for tuition in a full-time capacity at a public or independent school or any other registered institution and who presents the required number of subjects as stipulated in the policy document, *National policy pertaining to the programme and promotion requirements of the CS Grades R – 12*;

“grade” - means a grade as defined in the *South African Schools Act, 1996 (Act No. 84 of 1996)*;

“Head of Department” - as defined in the *South African Schools Act, 1996 (Act No. 84 of 1996)*;

“Head of an assessment body” - means the Head: Education of a provincial education department or the Head of an independent assessment body;

“Head of the institution” - as defined in the *South African Schools Act, 1996 (Act No. 84 of 1996)*;

“Home Language level” - means the language proficiency level that reflects the mastery of interpersonal communication skills required in social situations and the cognitive academic skills essential for learning across the curriculum. This level also provides

learners with a literary, aesthetic and imaginative ability that will provide them with the ability to create, imagine, and empower their understandings of the world they live in;

“immigrant candidate” - means a learner as contemplated in *paragraph 4(1)(a)* of this document;

“independent school” - means a school registered or deemed to be registered in terms of *section 46* of the *South African Schools Act, 1996 (Act No. 84 of 1996)*;

“internal assessment” - means an assessment, contemplated in *section 1* of the *General and Further Education and Training Quality Assurance (Act No. 58 of 2000)*;

“language levels” – means the proficiency levels at which all official and non-official languages are offered at school, i.e. Home Language, First Additional Language and Second Additional Language levels;

“learner” - as defined in the *South African Schools Act, 1996 (Act No. 84 of 1996)*;

“learner who experiences barriers to learning” – refers to any learner who has difficulties in accessing the curriculum due to factors that serve as barriers;

“MEC” - means a Member of the Executive Council, contemplated in *section 1* of the *South African Schools Act, 1996 (Act No. 84 of 1996)*;

“Minimum outcomes and standards” – means the minimum level at which a learner must attain the content and assessment requirements for all subjects listed in the *National Curriculum Statement Grades R – 12* as specified in the Curriculum and Assessment Policy Statements. It also includes the programme and promotion requirements for Grades R-12 as stipulated in *paragraphs 6, 7, 12, 14, 19, 21, 27 and 29* of this document;

“National Qualifications Framework (NQF)” – means the ten-level framework to provide for the registration of national standards and qualifications as contemplated in the *National Qualifications Framework Act, 2008 (Act No. 67 of 2008)*;

“National Senior Certificate” – means a qualification at Level 4 on the National Qualifications Framework (NQF) which is awarded to Grade 12 candidates who comply with the national policy requirements set out in the policy document, *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R – 12*;

“part-time candidate” means a Grade 12 learner who has enrolled at an institution for part-time studies and may enroll for any number of subjects in one examination sitting;

“progression” – means the advancement of a learner from one grade to the next, excluding Grade R, in spite of the learner not having complied with all the promotion requirements. Progression can be used to prevent a learner from being retained in a phase for a period exceeding four years as stipulated in the *Admission policy for ordinary public schools* as published as *Government Notice 2432, Government Gazette, Vol. 400, No. 19377* of 19 October 1998, provided that the underperformance of the learner in the previous grade is addressed in the grade to which the learner has been promoted;

“promotion” – means the movement of a learner from one grade to the next when that learner meets the minimum required level of achievement per subject in a particular grade, as well as complying with the promotion requirements of that grade as contemplated in the policy document; *National policy pertaining to the programme and promotion requirements of the NCS Grades R-12*;

“processes and procedures for the assessment of learner achievement” – means the conduct, administration and management of internal assessment, end-of year examination, and the final National Senior Certificate examination as stipulated in the policy document, *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R – 12*, the policy document, *National Protocol for Assessment Grades R – 12*, the *Curriculum and Assessment Policy Statements* of all approved subjects, and the policy document, *National policy on the conduct, administration and management of the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF)*;

“Provincial Education Department” - means an education department, contemplated in section 1 of the *Employment of Educators Act, 1998 (Act No. 76 of 1998)*;

“qualification” – means a registered qualification as contemplated in the *National Qualifications Framework Act, 2008 (Act No. 67 of 2008)*;

“repeat candidate” - means a candidate who has failed the Grade 12-year of the National Senior Certificate examination and/or the supplementary examination, or who wants to improve his or her National Senior Certificate examination results, and who wants to repeat the Grade 12-year or a subject, as a full-time learner or part-time candidate respectively;

“Second Additional Language level” - means the language proficiency level that focuses on the basic interpersonal communication skills needed in social situations and include intercultural communication. It is intended to further multilingualism. Although reading and writing will be developed, at this level the emphasis will be on developing listening and speaking skills;

“school” – as defined in the *South African Schools Act, 1996 (Act No. 84 of 1996)*;

“school-based assessment” – means assessment as defined in the policy document, *National Protocol for Assessment Grades R-12, Government Gazette No. 34600 of 12 September 2011*;

“supplementary examination” - means an examination granted under special conditions to a full-time, repeat and part-time candidates in the year following the National Senior Certificate examination;

“teacher file” - means the recording and planning documents used by the teacher, namely the formal programme of assessment, evidence of learner assessment/performance, all formal assessment tasks and marking guidelines, annual teaching plan/work schedule, textbook used and other resources,

“technical school” – means a focussed secondary school with a specialised infrastructure and specialised resources for the completion of the practical component of at least two of the following technology subjects, namely Civil Technology, Electrical Technology and Mechanical Technology, as well as Engineering Graphics and Design;

“technology subject (specialisation)” - means a focused technology subject with content matter related to industry of which specific aspects are assessed by means of a practical assessment task or practical examination. In this policy the technology subjects with specialisation are: Civil Technology, Electrical Technology, Mechanical Technology and Engineering Graphics and Design;

“Umalusi” – means Umalusi, the Council for Quality Assurance in General and Further Education and Training established in terms of the *General and Further Education and Training Quality Assurance Act, 2001 (Act No. 58 of 2001)*.

CHAPTER 1

INTRODUCING THE POLICY FOR THE PROGRAMME AND PROMOTION REQUIREMENTS OF THE NATIONAL CURRICULUM STATEMENT GRADES R - 12

1. PURPOSE OF THE DOCUMENT

- (1) *Section 3(4)(l) of the National Education Policy Act, 1996 (No. 27 of 1996) makes provision for the determination of national education policy regarding curriculum frameworks, core syllabuses and education programmes, learning standards, examinations and the certification of qualifications. This provision is subject to the provisions of any law establishing a national qualifications framework or a certifying or accrediting body.*
- (2) The policy stipulated in this document applies to public ordinary and special schools and those independent schools that offer the *National Curriculum Statement Grades R – 12*, which comprise:
 - (a) Curriculum and Assessment Policy Statements for all approved subjects listed in this document;
 - (b) *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R – 12; and*
 - (c) *National Protocol for Assessment Grades R – 12.*
- (3) The policy document contemplated in *subparagraph (2)* forms the basis for the Minister of Basic Education to determine minimum outcomes and standards, as well as the processes and procedures for the assessment of learner achievement as stipulated in *section 6A of the South African Schools Act, 1996 (Act No. 84 of 1996)* which is applicable to public and independent schools.
- (4) The outcomes and standards determined in terms of *section 6A of the South African Schools Act, 1996 (Act. No. 84 of 1996)* will be translated into regulations in terms of *section 61 of the said Act.*

2. THE GROUPING OF SUBJECTS LISTED IN THE NATIONAL CURRICULUM STATEMENT GRADES R – 12

- (1) The *National Curriculum Statement Grades R – 12* uses the twelve Organising Fields of the National Qualifications Framework (NQF) for organising and listing purposes.
- (2) The Organising Fields listed at Annexure A, are used for organising and listing purposes.

CHAPTER 2

GENERAL REQUIREMENTS OF GENERAL EDUCATION AND TRAINING: GRADES R - 9

3. DURATION

The duration of the General Education and Training Phase is ten years, namely Grades R - 9. To be promoted to Grade 10 a learner must:

- (1) complete the programme requirements for each grade of Grades R – 9 separately; and
- (2) comply with the assessment and promotion requirements for each grade of Grades R - 9 as contemplated in the policy document, *National Protocol for Assessment Grades R – 12*, and the Curriculum and Assessment Policy Statements of the various subjects for each of the three phases of the General Education and Training Band, namely Foundation, Intermediate and Senior Phases as listed in this document.

4. CONCESSIONS IN THE GENERAL EDUCATION AND TRAINING PHASE

- (1) Immigrants
 - (a) An immigrant learner is:
 - (i) a child or a dependent of a diplomatic representative of a foreign government accredited in South Africa; or
 - (ii) a person who:
 - (aa) first enrolled at and entered a South African school in Grade 7 or a more senior grade, or
 - (bb) having begun his or her schooling at a school in South Africa, has attended school outside South Africa for two or more consecutive years after Grade 3 or its equivalent, and has subsequently returned to South Africa.

CHAPTER 5

SENIOR PHASE, GRADES 7 – 9

18. APPROVED SUBJECTS

TABLE 11: OFFICIAL LANGUAGES

SUBJECTS	SUBJECT NUMBER		
	Grade 7	Grade 8	Grade 9
Afrikaans Home Language	13304492	13304502	13304512
Afrikaans First Additional Language	13314522	13314532	13314542
Afrikaans Second Additional Language	13354552	13354562	13354572
English Home Language	13304582	13304592	13304602
English First Additional Language	13314612	13314622	13314632
English Second Additional Language	13354642	13354652	13354662
IsiNdebele Home Language	13304672	13304682	13304692
IsiNdebele First Additional Language	13314702	13314712	13314722
IsiNdebele Second Additional Language	13354732	13354742	13354752
IsiXhosa Home Language	13304762	13304772	13304782
IsiXhosa First Additional Language	13314792	13314802	13314812
IsiXhosa Second Additional Language	13354822	13354832	13354842
IsiZulu Home Language	13304852	13304862	13304872
IsiZulu First Additional Language	13314882	13314892	13314902
IsiZulu Second Additional Language	13354912	13354922	13354932
Sepedi Home Language	13304942	13304952	13304962
Sepedi First Additional Language	13314972	13314982	13314992
Sepedi Second Additional Language	13355002	13355012	13355022
Sesotho Home Language	13305032	13305042	13305052
Sesotho First Additional Language	13315062	13315072	13315082
Sesotho Second Additional Language	13355092	13355102	13355112

TABLE 11: OFFICIAL LANGUAGES (CONT.)

SUBJECTS	SUBJECT NUMBER		
	Grade 7	Grade 8	Grade 9
Setswana Home Language	13305122	13305132	13305142
Setswana First Additional Language	13315152	13315162	13315172
Setswana Second Additional Language	13355182	13355192	13355202
SiSwati Home Language	13305212	13305222	13305232
SiSwati First Additional Language	13315242	13315252	13315262
SiSwati Second Additional Language	13355272	13355282	13355292
Tshivenda Home Language	13305302	13305312	13305322
Tshivenda First Additional Language	13315332	13315342	13315352
Tshivenda Second Additional Language	13355362	13355372	13355382
Xitsonga Home Language	13305392	13305402	13305412
Xitsonga First Additional Language	13315422	13315432	13315442
Xitsonga Second Additional Language	13355452	13355462	13355472

TABLE 11A: LANGUAGE WITH THE STATUS OF AN OFFICIAL LANGUAGE FOR THE PURPOSE OF LEARNING AND TEACHING AT A PUBLIC SCHOOL

SUBJECTS	SUBJECT NUMBER		
	Grade 7	Grade 8	Grade 9
South African Sign Language Home Language	13305902	13305912	13305922

TABLE 11B: NON-OFFICIAL LANGUAGES

SUBJECTS	SUBJECT NUMBER		
	Grade 7	Grade 8	Grade 9
German Second Additional Language	13355682	13355692	13355702
Mandarin Second Additional Language	13355992	13356002	13356012
Serbian Home Language	13355712	13355722	13355732
Serbian Second Additional Language	13355742	13355752	13355762

**TABLE 12: PHYSICAL, MATHEMATICAL, COMPUTER AND LIFE
SCIENCES**

SUBJECTS	SUBJECT NUMBER		
	Grade 7	Grade 8	Grade 9
Natural Sciences	19351402	19351412	19351422
Mathematics	19331432	19331442	19331452

TABLE 13: HUMAN AND SOCIAL SCIENCES

SUBJECTS	SUBJECT NUMBER		
	Grade 7	Grade 8	Grade 9
Social Sciences	16351242	16351252	16351262
Life Orientation	16341272	16341282	16341292

TABLE 14: ENGINEERING AND TECHNOLOGY

SUBJECTS	SUBJECT NUMBER		
	Grade 7	Grade 8	Grade 9
Technology	15351122	15351132	15351142

TABLE 15 CULTURE AND ARTS

SUBJECTS	SUBJECT NUMBER		
	Grade 7	Grade 8	Grade 9
Arts and Culture	11351152	11351162	11351172

**TABLE 16: BUSINESS, COMMERCE AND MANAGEMENT
STUDIES**

SUBJECTS	SUBJECT NUMBER		
	Grade 7	Grade 8	Grade 9
Economic and Management Sciences	12351092	12351102	12351112

19. PROGRAMME REQUIREMENTS FOR GRADES 7 -9

A learner must for each of Grades 7 – 9 offer and complete nine (9) subjects as contemplated in *subparagraphs (1) to (8)* and listed in Tables 11 – 16:

- (1) Two (2) official languages selected from Table 11, provided that one of the two official languages is offered on the Home Language level, and the other language, on either Home or on at least First Additional Language level, and provided further that one of the two languages offered is the language of learning and teaching or the language of literacy in the case of Deaf Learners;
- (1A) Deaf learners may, subject to *paragraph 21(1)(eA))*, select South African Sign Language at Home Language level listed in Table 11A in lieu of the official language at First Additional Language level as contemplated in *sub-paragraph (1)*;
- (2) Mathematics selected from Table 12;
- (3) Natural Sciences selected from Table 12;
- (4) Life Orientation from Table 13;
- (5) Social Sciences from Table 13;
- (6) Technology from Table 14;
- (7) Arts and Culture from Table 15; and
- (8) Economic and Management Sciences from Table 16.
- (9) One official or approved non-official language may be offered as an optional subject on at least Second Additional Language level, provided that in the case of an official language, the language offered must not be a language offered in terms of *subparagraph (1)* above. The Additional Language will be regarded as

an additional subject not to be taken into account for promotion requirements as contemplated in *paragraph 21*.

- (9A) South African Sign Language at Home Language level, listed in Table 11A, may be offered as an optional subject by non-deaf learners, provided that South African Sign Language at Home Language level will be regarded as an additional subject not to be taken into account for promotion requirements as contemplated in *paragraph 21*.
- (10) Subject to *paragraph 4(1)(d)* immigrant learners exempted from achieving one official language as contemplated in *paragraph 4(1)(c)(ii)*, may offer his or her home language in lieu of one official language, provided it is an approved language on at least First Additional Language level as contemplated in *paragraph 4(1)(c)(i)*.

20. PROVISOS

- (1) Not more than one language shall be offered from the same language group, namely:
 - (a) isiXhosa, isiZulu, SiSwati and isiNdebele; and
 - (b) Sepedi, Sesotho and Setswana.
- (2) The same language shall not be offered on Home Language and First or Second Additional Language level, or on First and Second Additional Language level.

21. PROMOTION REQUIREMENTS FOR GRADES 7 -9

- (1) Learners in Grades 7-9 will be promoted from grade to grade if they have offered nine (9) subjects listed in *paragraph 19(1) to (8)* and have complied with the promotion requirements in eight (8) of the subjects as contemplated in *subparagraphs (a) to (e)*, provided the School-Based Assessment component of the ninth subject has been completed.

- (a) Adequate Achievement (Level 4) in one language at Home Language level as contemplated in *paragraph 19(1)*;
- (b) Moderate Achievement (Level 3) in the second required official language at First Additional Language level as contemplated in *paragraph 19(1)*.
- (bA) Moderate Achievement (Level 3) (40%-49%) in South African Sign Language at Home Language level as contemplated in *paragraph 19(1A)*, if offered by Deaf learners in lieu of an official language at First Additional Language level;
- (c) Moderate Achievement (Level 3) in Mathematics as contemplated in *paragraph 19(2)*;
- (d) Moderate Achievement (Level 3) in any three (3) of the other required subjects as contemplated in *paragraphs 19(3), 19(4), 19(5), 19(6), 19(7) and 19(8)*; and
- (e) Subject to *subparagraph (f)*, at least an Elementary Achievement (Level 2) in any two (2) of the other required subjects as contemplated in *paragraphs 19(3), 19(4), 19(5), 19(6), 19(7) and 19(8)*.
- (eA) Deaf learners, who do not offer South African Sign Language at Home Language level, may obtain an Elementary Achievement (Level 2) (30—39%) in one of the two required official languages as contemplated in *sub paragraphs. (1a), and (1b) above*.
- (f) Immigrant learners may be exempted from achieving one official language as contemplated in *paragraph 4(1)(c)(ii)*, provided they obtain at least an Elementary Achievement (Level 2) in all four (4) the remaining subjects contemplated in *subparagraph (e)*.
- (2) A learner may only be retained once in the Senior Phase in order to prevent the learner being retained in this phase for longer than four years.

- (3) A learner who is not ready to function at the expected level and who has been retained in the previous phases for four (4) years or more and who is likely to be retained again in the third phase for four (4) years or more, should receive the necessary support in order to achieve an appropriate level of competence as contemplated in *sub-regulation (1)* in order to progress to the next grade.

22. ASSESSMENT

- (1) Learners will be assessed internally according to the requirements as specified in the policy document, *National Protocol for Assessment Grades R – 12* and the Curriculum and Assessment Policy Statements.
- (2) The end-of-year assessment must consist of an end-of-year examination that is internally set, marked and moderated, as specified in the policy document, *National Protocol for Assessment Grades R – 12* and the Curriculum and Assessment Policy Statements.
- (3) School-Based Assessment is a compulsory component of the promotion marks. The School-Based Assessment component must be 40% during the year, and the final examination component 60% of the promotion mark.

23. RECORDING AND REPORTING

- (1) Seven levels of competence have been described for subjects listed in the *National Curriculum Statement Grades R - 12*. The various achievement levels and their corresponding percentage bands are as shown in Table 17 below.

**TABLE 17: SCALE OF ACHIEVEMENT FOR THE NATIONAL CURRICULUM
STATEMENT GRADES 7 – 9**

ACHIEVEMENT LEVEL	ACHIEVEMENT DESCRIPTION	%
7	Outstanding Achievement	80 – 100
6	Meritorious Achievement	70 – 79
5	Substantial Achievement	60 – 69
4	Adequate Achievement	50 – 59
3	Moderate Achievement	40 – 49
2	Elementary Achievement	30 – 39
1	Not Achieved	0 – 29

- (2) These descriptions are intended to assist teachers to assess learners and grade them at the correct level.
- (3) Teachers or examiners must record learners' results in marks and report them as percentages.
- (4) The percentage obtained will determine the rating code on the scale of achievement.

24. TIME ALLOCATION

- (1) The instructional time for subjects in the Senior Phase is indicated in the Table 18 below:

TABLE 18: TIME ALLOCATION PER WEEK

SUBJECT	HOURS
Home Language	5
First Additional Language	4
Mathematics	4,5
Natural Science	3
Social Sciences	3
Technology	2
Economic and Management Sciences	2
Life Orientation	2
Arts and Culture	2
TOTAL	27,5

- (2) The instructional time for Grades 7, 8 and 9 is 27,5 hours. The time allocated to breaks, assemblies and extramural activities is excluded from this time allocation.
- (3) Schools offering an optional language selected from Table 11 on at least Second Additional Language level as contemplated in *paragraph 19(9)*, or South African Sign Language at Home Language level contemplated in *paragraph 19(9A)* may not use the time allocated for the languages listed in Table 18. Optional languages may only be offered if the school can make an arrangement for the allocation of additional time to the allocated 27,5 hours.

CHAPTER 6

FURTHER EDUCATION AND TRAINING: GRADES 10 – 12

25. DURATION

- (1) The duration of the National Senior Certificate is 3 years, namely Grades 10 - 12.
A learner must:
 - (a) offer all subjects selected for all three grades, Grades 10-12 and complete the programme requirements for these grades separately; and
 - (b) comply with the SBA requirements for Grades 10, 11 and 12 and the external assessment requirements of Grade 12 as contemplated in the policy document *National Protocol for Assessment Grades R – 12*, and the Curriculum and Assessment Policy Statements of the various subjects listed in Annexure B.
- (2) Subject to the approval of the Head of the assessment body or his or her nominee, a learner with an appropriate statement of achievement at Grades 10 or 11 level, issued by an approved or recognised assessment body, may be placed at either Grade 11 or 12.

26. ENTRANCE REQUIREMENTS FOR FURTHER EDUCATION AND TRAINING, GRADES 10 - 12

- (1) The minimum entrance requirements for Grade 10 are:
 - (a) an official Grade 9 school report which indicates that a learner has met the requirements for promotion to Grade 10 or that the learner was progressed in the Senior Phase in terms of *paragraph 31* of the *Admission policy for ordinary public schools, Government Notice 2432* in

the *Government Gazette*, Vol. 400, No. 19377 of 19 October 1998; or

- (b) a General Education and Training Certificate (GETC) for Adult Basic Education and Training (ABET); or
 - (c) a NQF Level 1 Certificate which requires two languages; or
 - (d) a recognised equivalent qualification obtained at NQF Level 1 which requires two official languages.
 - (e) an official document of approval from the relevant Head of Education confirming that a learner who has received home education prior to Grade 10 has reached the required level in Grade 9.
- (2) For Entrance into Grades 11 and 12, an appropriate statement of achievement at the appropriate levels is issued by an approved or recognised assessment body.

26A STUDY PATHWAYS FOR GRADES 10 - 12

- (1) Learners entering the FET Phase must follow one of the following two pathways, namely an Academic (General) or Technical pathway.
- (2) Learners following the Academic (General) pathway must follow the curriculum as contemplated in sub-paragraphs 2(a), 2(b), 2(c), 2(d)(i) and 2(e).
- (3) Learners following the Technical pathway must follow the curriculum as contemplated in sub-paragraphs 2(a), 2(bA), 2(c) and 2(d)(ii).
- (4) To qualify for the Technical pathway a learner must be enrolled at a technical school approved and registered by the relevant Provincial Education Department.

27. PROGRAMME REQUIREMENTS FOR GRADES 10 – 12

- (1) The approved National Senior Certificate subjects listed in Annexure B, which is grouped in two main categories, namely **Groups A** and **B**.
- (2) Learners in the Further Education and Training Phase, following either the Academic (General) or Technical pathway, must select four subjects from **Group A** as follows:
 - (a) Two (2) official languages selected from Annexure B, Table A1, provided that one of the two official languages is offered on the Home Language level, and the other, on either Home or First Additional Language level, and provided further that one of the two languages is the language of learning and teaching.
 - (aA) Deaf learners may, subject to *paragraph 33(2)(a)(i)*, select South African Sign Language at Home Language level listed in Table B4A in lieu of the official language at First Additional Language level as contemplated in *sub-paragraph (2)(a)*;
 - (b) Subject to *paragraphs 28(4)* and *28(4A)*, Mathematics or Mathematical Literacy selected from Annexure B, Table A2 for the Academic (General) pathway, or
 - (bA) Subject to *paragraphs 28(4B)* and *28(4C)*, Mathematics or Technical Mathematics selected from Annexure B, Table A2 for the Technical pathway.
 - (c) Life Orientation in Annexure B, Table A3.
 - (d) Subject to *paragraphs 28(4D)* and *28(4E)*, both the General and Technical pathways must select a minimum of three subjects selected as follows from **Group B** Annexure B, Tables B1-B8.

- (i) Academic (General) pathway-
 - (aa) of the minimum three required subjects, a maximum of two additional languages over and above the two official languages contemplated in *subparagraph (a)* may be offered from both Tables A1 and B4.
 - (bb) Learners may offer a maximum of one subject developed by accredited assessment bodies other than the Department of Basic Education and approved by the Minister of Basic Education for this purpose and listed in Annexures C1 – C6, in the place of one Group B subject.
- (ii) Technical pathway-
 - (aa) one of the following three technology subjects (specialisation)-
 - (aaa) Civil Technology (Specialisation);
 - (bbb) Electrical Technology (Specialisation); and
 - (ccc) Mechanical Technology (Specialisation);
 - (bb) Engineering Graphics and Design; and
 - (cc) Physical Sciences or Technical Science.
- (dA) South African Sign Language at Home Language level, selected from **Group B, Annexure B, Tables B1-B8**, may be offered as one of the three optional subjects as contemplated in sub-paragraph (d).

28. PROVISOS

- (1) A candidate may offer more than the required minimum of seven subjects provided that he or she complies with the following requirements:
 - (a) the additional subjects must be offered for all three years of the National Senior Certificate programme, namely Grades 10-12.
 - (b) all the internal assessment requirements and the Practical Assessment Tasks as contemplated in the policy document *National Protocol for Assessment Grades R – 12* and the Curriculum and Assessment Policy Statements for the required subjects where applicable, must be met for all three years of study, namely Grades 10, 11 and 12.
- (2) Not more than one language shall be offered from the same language group, namely:
 - (a) isiXhosa, isiZulu, SiSwati and isiNdebele; and
 - (b) Sepedi, Sesotho and Setswana.
- (3) The same language shall not be offered on Home Language and First or Second Additional Language level, or on First and Second Additional Language level.
- (4) A candidate from the Academic (General) pathway may not offer both Mathematics and Mathematical Literacy.
 - (4A) A candidate from the Academic (General) pathway may not offer Technical Mathematics.
 - (4B) A candidate from the Technical pathway may not offer Mathematical Literacy.
 - (4C) A candidate from the Technical pathway may not offer both Mathematics and Technical Mathematics.

- (4D) Learners offering Physical Sciences and Accounting as one or more of their optional subjects selected from Group B in the policy document, *National policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grades R – 12*; must offer Mathematics as a compulsory subject selected from Group A in the said policy document.
- (4E) A candidate from the Academic (General) pathway may not offer Technical Science.
- (4F) A candidate from the Academic (General) pathway may not offer any one of the following three technology subjects (Specialisation)-
 - (a) Civil Technology (Specialisation);
 - (b) Electrical Technology (Specialisation); and
 - (c) Mechanical Technology (Specialisation).
- (5) A candidate may not offer both Consumer Studies and Hospitality Studies.
- (5A) Learners offering Sport and Exercise Science as a subject must offer either Physical Sciences or Life Sciences.
- (6) Subject to *subparagraph 7*, a maximum of one subject developed and assessed by an accredited assessment body that is not the Department of Basic Education, and approved by the Minister of Basic Education for this purpose and listed in Annexure C may be offered by a learner from the Academic (General) pathway to meet the requirements of one of the three (3) required Group B subjects as contemplated in *paragraph 27(2)(d)*.
- (7) The Practical Music programme of one of the Music examination bodies, listed in Table C2 of Annexure C, namely the Associated Board of Royal Schools Practical Music Examination, Trinity College of London Practical Music Examination and Unisa Practical Music Examination may be offered in terms of the following conditions:

- (a) The External Music programmes listed in Table C2 of Annexure C may only be offered as an eighth National Senior Certificate subject.
- (b) A learner may only enrol for the selected External Music programme in his or her Grade 12-year.
- (c) The selected External Music programmes must be offered at Grade 7 Music level.
- (d) The submission of the final examination marks obtained by the candidates must be determined by the three External Music Examination Bodies.
- (e) The External Music Examination Bodies' final results based on the theory and practical components will be accepted as the final mark obtained by the candidate.
- (f) The prerequisite theory component for the three External Music Examination Bodies' Practical Music Examination, Grade 7 is as follows:
 - (i) Associated Board of Royal Schools of Music: Grade 6 Theory;
 - (ii) Trinity College of London: Grade 6 Theory; and
 - (iii) UNISA: Grade 5 Theory.
- (g) The practical component must be completed by the candidate not later than June of the Grade-12 year.
- (h) The theory must be completed by the candidate, not earlier than October of the Grade 11-year.
- (i) The marks supplied by the three External Music Examination Bodies will be indicated on the National Senior Certificate as a subject passed by an approved and accredited assessment body in terms of the requirements as determined by that body. The actual mark obtained by the candidate will be reflected on the National Senior Certificate with an asterisk

denoting that this subject was offered by an external assessment body in terms of that body's requirements.

- (j) A learner will be restricted to a maximum of one of the Associated Board of Royal Schools of Music, or Trinity College of London, or the UNISA Practical Music Examinations.
- (k) A learner who offers Music listed in Table B2 of Annexure B as a subject and one of the Associated Board of Royal Schools of Music, or Trinity College of London, or the UNISA Practical Music Examination, Grade 7, as an eighth subject, may not offer the same main instrument as a first and second instrument.
- (l) A learner who offers one of the Associated Board of Royal Schools of Music, or Trinity College of London, or the UNISA Practical Music Examination, Grade 7 as an eighth subject may not offer a Music programme, comprising a combination of components of the Music programmes of the three External Music Examination Bodies.
- (m) The Music programmes of the Associated Board of Royal Schools of Music, or Trinity College of London, or UNISA may not be offered during official school hours, but only as an extra-curricular subject.
- (n) A learner who offers one of the Associated Board of Royal Schools of Music, or Trinity College of London, or the UNISA Practical Music Examination, Grade 7 as an eighth subject may not replace a failed subject offered by the learner in terms of the seven-subject package of the National Senior Certificate.

29. PROMOTION REQUIREMENTS FOR GRADES 10 - 12

- (1) Learners in Grades 10-12 will be promoted from grade to grade if they have offered and completed the School-Based Assessment, Practical Assessment Tasks, where applicable, oral assessment and end-of-year examination requirements in not fewer than seven (7) subjects as contemplated in the policy document, *National Protocol for Assessment Grades R – 12* and the Curriculum and Assessment Policy Statements of the various subjects listed in Annexure A:
 - (a) Achieved 40% in three subjects, one of which is an official language at Home Language level, and 30% in three subjects, provided the School-Based Assessment component is submitted in the subject failed.
 - (b) A condonation of a maximum of one (1) subject will only be applied to a Grade 12 candidate in the final National Senior Certificate examination, if such a candidate requires a maximum of 2%, either to obtain a pass at 30% or 40%. Such a condonation will be applied in only one subject, provided the application of the condonation allows the candidate to obtain the National Senior Certificate qualification.
 - (c) Subject to *paragraph 28(7)* learners who offer a Music programme from the Associated Board of Royal Schools of Music or Trinity College of London or UNISA, must obtain the following ratings:
 - (i) the Associated Board of Royal Schools Practical Music Examination Grade 7: at least 65%.
 - (ii) Trinity College of London Practical Music Examination Grade 7: at least 65%.
 - (ii) UNISA Practical Music Examination Grade 7: at least 50%.
- (2) The norm for repetition is stipulated in *paragraph 31 of the Admission policy for ordinary public schools, Government Notice 2432 in the Government Gazette, Vol. 400, No. 19377 of 19 October 1998*, as one retained once in the Further

Education and Training Phase in order to prevent the learner being retained in this phase for longer than four years.

- (3) Progression in Grades 10-12 does not guarantee in the final certification of a learner in Grade 12 and such a learner must comply with the certification requirements as contemplated in *paragraph 37(1)(a) of the policy document, National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R -12* to enable him or her to obtain a National Senior Certificate.

30. ASSESSMENT IN GRADES 10 AND 11

- (1) Learners will be assessed internally according to the requirements specified in the policy document, *National Protocol for Assessment Grades R– 12* and the Curriculum and Assessment Policy Statements for the subjects listed in the *National Curriculum Statement Grades R - 12*. The School-Based Assessment marks allocated to assessment tasks completed during the school year will be 25% of the total mark, and the end-of-year mark 75% of the total mark.
- (2) The weighting for assessment in the subject Life Orientation in Grades 10 and 11 is an exception where the School-Based Assessment component will comprise 100% of the total mark. The School-Based Assessment will be externally moderated.
- 3) The end-of-year assessment must consist of an end-of-year examination that is internally set, marked and moderated, as specified in the policy document, *National Protocol for Assessment Grades R– 12* and the Curriculum and Assessment Policy Statements for the subjects listed in the *National Curriculum Statement Grades R - 12*.

31. ASSESSMENT IN GRADE 12

- (1) The School-Based Assessment mark will be 25%, and the external assessment mark 75% of the total mark, as specified in the policy document, *National Protocol for Assessment Grades R– 12* and the Curriculum and Assessment Policy Statements for the subjects listed in the *National Curriculum Statement Grades R - 12*. The School-Based Assessment will be externally moderated.
- (2) The weighting for assessment in the subject Life Orientation in Grade 12 is an exception. The School-Based Assessment component will be 100% of the total mark. In the National Senior Certificate examination the final promotion mark in Life Orientation will be based on internal assessment which must be externally moderated, as well as a Common Assessment task which is externally set and moderated. Monitoring and moderation mechanisms will be determined by the assessment body and Umalusi.
- (2A) The Physical Education Task (PET) in Life Orientation, constitutes the fifth task and is administered across all four school terms, with the exception of Grade 12, which will be three school terms. The mark allocation for the PET (Task 5) is 20% of the total mark out of 400 for Life Orientation, i.e. 80 marks.
- (3) The final mark is rounded down if the first decimal is less than 5 and rounded up if the decimal is 5 and above e.g. a final mark of 70,3 will be rounded down to 70 and a final mark of 70.6 is rounded up to 71.

32. RECORDING AND REPORTING

- (1) Seven levels of competence have been described for all the subjects in the policy document, *National Protocol for Assessment Grades R– 12* and the Curriculum and Assessment Policy Statements for the subjects listed in the *National Curriculum Statement Grades R - 12*. The various achievement levels and their corresponding percentage bands are shown in Table 19 below.

**TABLE 19: SCALE OF ACHIEVEMENT FOR THE NATIONAL CURRICULUM
STATEMENT GRADES 10-12**

ACHIEVEMENT LEVEL	ACHIEVEMENT DESCRIPTION	MARKS %
7	Outstanding achievement	80 – 100
6	Meritorious achievement	70 – 79
5	Substantial achievement	60 – 69
4	Adequate achievement	50 – 59
3	Moderate achievement	40 – 49
2	Elementary achievement	30 – 39
1	Not achieved	0 – 29

- (2) These descriptions are intended to assist teachers to assess learners and grade them at the correct level.
- (3) Teachers or examiners must record learners' results in marks and report them as percentages.
- (4) The percentage obtained will determine which rating code on the scale of achievement will be allocated to a learner.

33. CONCESSIONS

- (1) Immigrants
 - (a) An immigrant candidate is:
 - (i) a child or a dependent of a diplomatic representative of a foreign government accredited in South Africa; or
 - (ii) a person who:

- (aa) first enrolled at and entered a South African school in Grade 7 or a more senior grade, or
 - (bb) having begun his or her schooling at a school in South Africa, has attended school outside South Africa for two or more consecutive years after Grade 3 or its equivalent, and has subsequently returned to South Africa.
- (b) An immigrant candidate as contemplated above may offer only one (1) official language on at least First Additional Language Level, provided it is the language of learning and teaching, and obtain a rating of 30% level in that language, provided that another subject from Group B is offered in lieu of the one official language that is not offered, provided further that the immigrant candidate complies with the promotion requirements as contemplated in *paragraph 29(1)*.
- (c) However, instead of offering another subject from Group B in lieu of the one official language that is not offered, an immigrant candidate may, subject to *subparagraph (b)*, offer his or her home language in lieu of that one official language, subject to the following:
 - (i) Such language is listed on Home Language level in Table B4 at Annexure B.
 - (ii) Offer his or her home language on the A-Level of the General Certificate of Education (GCE) of the United Kingdom, or an examination recognised by the Department of Basic Education as equivalent to Home Language level for the purpose of *subparagraph (b)*.
 - (iii) The marks as supplied by the concerned assessment body will be taken into account for promotion purposes. If the actual marks are not available, the results will be converted in accordance with Table 20 below, with the proviso that the candidate may not offer two similarly named languages.

TABLE 20: CONVERSION SCALE

PROGRAMME REQUIREMENTS			
A-Level		National Policy	
Symbol	%	MARKS	%
A	70-100	280	70
B	60-69	240	60
C	55-59	220	55
D	50-54	200	50
E	40-49	160	40
F	30-39	140	35

(d) To be classified as an immigrant candidate, such a candidate must be in possession of:

- (i) the relevant official documentation issued by the Department of Home Affairs; and
- (ii) the relevant official documentation issued by the school where the learner entered the South African school system for the first time.

(2) Learners who experience barriers to learning

(a) The following concessions may apply to learners who experience the following barriers to learning:

- (i) A learner who is Deaf who do not offer South African Sign Language at Home Language level may offer one (1) official language at First Additional Language level which is the language of learning and teaching, provided that another subject from Group B is offered in lieu of the one official language that is not offered, provided further that such Deaf candidate complies with the promotion requirements as contemplated in *paragraph 29(1)*.

(ii) Learners with communication and language impairments, e.g. aphasia and dyslexia may offer only one (1) official language at First Additional Language level which is the language of learning and teaching, provided that another subject from Group B is offered in lieu of the one official language that is not offered, provided further that such aphasic or dyslectic candidate complies with the promotion requirements as contemplated in *paragraph 29(1)*.

(iii) Learners who have been diagnosed to have a mathematical disorder such as dyscalculia may be exempted from the offering of Mathematical Literacy or Mathematics, provided that another subject from Group B is offered in lieu of Mathematical Literacy or Mathematics, provided further that such candidate complies with the promotion requirements as contemplated in *paragraph 29(1)*.

(b) *White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System (2001)*, guides policies related to learners experiencing barriers to learning.

34. A NATIONAL SENIOR CERTIFICATE WITH ENDORSEMENT FOR LEARNERS WHO EXPERIENCE BARRIERS TO LEARNING

(1) Learners with special needs may either be accommodated in special schools or in ordinary schools where appropriate support is offered.

(2) Special schools are schools that provide education to learners who need high-level individualised and specialised support on a high-frequency basis. The role of these schools is twofold:

(a) full-time provision of appropriate and quality education and support for those learners, who are enrolled at these schools; and

- (b) providing advice, guidelines, training and mentoring on a consultative and part-time basis to both teachers and learners in ordinary schools with regard to curriculum, assessment and instruction matters.
- (3) The following learners are regarded as learners with special needs_for whom measures should be taken in ordinary as well as special schools to assist with the barriers to learning that they face:
 - (a) Learners who have **neurological barriers** to learning, reading, spelling, dysgraphia, mathematical calculations and numeracy skills, and the understanding of the written word.
 - (b) Learners (deaf and hard of hearing learners) whose **hearing impairments** present barriers to learning and for whom learning should be facilitated through sign language within an environment which promotes the linguistic identity of the Deaf community and bilingualism which also ensures the availability of assistive technology.
 - (c) Learners who have severe **visual barriers to learning** (blind and partially sighted) and for whom learning should be facilitated through effective individualised support measures, specialised teaching methods, the use of Braille and large print and the application of specialised devices such as Braille equipment, magnification cameras and CCTV in classrooms, screen reading software, magnification software, etc.
 - (d) Learners who have **physical barriers to learning** and whose level of functioning is restricted due to limited gross and fine motor movements, dependency on the availability of certain devices (e.g. wheel chairs), medical conditions and inaccessible school buildings. The term physical disability covers a range of conditions from congenital disabilities to impairments acquired as a result of illness of which the most common conditions are spinal bifida, cerebral palsy, muscular dystrophy, haemophilia, cardiovascular and pulmonary conditions.

- (e) Learners who experience **mild to severe intellectual barriers to learning** whose specific educational needs should be met in mainstream schools and special schools through the differentiation and adaptation of the curriculum in environments which encourage the development of their full potential, independence and socialisation.
 - (f) Learners with **multiple barriers to learning**.
 - (g) Learners with **severe behavioural and emotional barriers to learning**.
 - (h) Learners with any medically assessed special need that may not fall under the above categories.
- (4) Grade 10-12 learners who experience barriers to learning and who meet one of the following requirements may either offer the National Senior Certificate programme as stipulated in *paragraphs 26 to 32 and 35 to 38* of this document or the *National Senior Certificate with Endorsement* as contemplated in *subparagraphs 5, 6 and 8*:
- (a) Learners with extensive barriers to learning who are in special schools in terms of *section 5(6) of the South African Schools Act, 1996 (Act No. 84 of 1996)*; or
 - (b) Learners who experience barriers to learning who are in ordinary schools in terms of *section 12(4) of the South African Schools Act, 1996 (Act No. 84 of 1996)* and who have been identified by the relevant provincial authority as eligible for this condonation;
- (5) Subject to *subparagraph (4)*, learners with special needs who were unsuccessful in obtaining a National Senior Certificate at Level 4 on the NQF, or who cannot meet the programme and or promotion requirements of the National Senior Certificate at Level 4 on the NQF as stipulated in *paragraphs 27, 28 and 29* of this document, may be issued with a *National Senior Certificate with*

Endorsement, provided they have met the following programme and promotion requirements:

- (a) Offered and completed the internal and external assessment requirements in not fewer than five (5) subjects selected as follows from Annexure B contained in this document.
 - (i) Three (3) subjects from **Group A** in this document, selected as follows:
 - (aa) One (1) official language selected from Annexure B, Table A1, provided that the official language is offered on at least First Additional Language level, and provided further that the language is the language of learning and teaching.
 - (bb) Mathematics or Mathematical Literacy selected from Annexure B, Table A2.
 - (cc) Life Orientation in Annexure B, Table A3.
 - (dd) A minimum of any two (2) subjects selected from **Group B** Annexure B, Tables B1-B8 in this document.
- (6) Subject to *subparagraph (4)*, a *National Senior Certificate with Endorsement* shall be issued to a candidate who experiences barriers to learning who has achieved 30% in five subjects.
- (7) Should a learner who has enrolled for the *National Senior Certificate with Endorsement* offer a sixth subject, such a learner must achieve 30% in five of the six subjects, one of which is an official language on at least First Additional Language level, provided the School-Based Assessment component is submitted in the sixth subject.
- (8) Concessions regarding immigrant learners and learners who experience barriers to learning related to deafness and mathematical disorder such as dyscalculia, as contemplated in *paragraph 33* of this document, will also be applicable to the learners enrolling for the *National Senior Certificate with Endorsement*.

35. CHANGING SUBJECTS IN GRADES 10, 11 AND 12

- (1) A learner may change a maximum of two subjects in Grade 10, provided this is done by the end of the second term, subject to the approval of the Principal of the school where the learner is registered. Such change must be done before 30 June of the Grade 10 year.
- (2) A learner may change two subjects in Grade 11, provided this is done before 31 March, subject to the approval of the Principal of the school where the learner is registered.
- (3) In exceptional cases a learner may change one additional subject in Grade 11, provided this is done before 15 December of the Grade 11-year.
- (4) Approval for changing a subject in Grade 12 must be obtained from the Head of the assessment body. The following documents are needed:
 - (a) a letter of motivation from the learner's parent or guardian;
 - (b) a letter from the Principal, either supporting or providing reasons for not supporting the change; and
 - (c) a letter from the subject teacher, outlining the programme to be followed to assist the learner in covering those aspects of the Curriculum and Assessment Policy Statements of the new subject for the previous grades that were not completed.
- (5) A learner who changes a subject in Grades 10, 11 or 12 will be exempted from the School-Based Assessment requirement of the new subject for the period before the change was effected, provided that:
 - (a) he or she has complied with all the School-Based Assessment requirements of the subject he or she wants to change for the period before the change is to be effected; and
 - (b) he or she complies with all the remaining School-Based Assessment requirements of the new subject from the date the change was effected.

- (6) The learner, or the parent or guardian of the learner who changes a subject is in Grades 10, 11 or 12 and who encounters learning difficulties due to the subject change may not hold the provincial education department responsible for changing a subject.

36. TIME ALLOCATION

- (1) In terms of the *Personnel Administration Measures (PAM)* as determined in *section 4* of the *Employment of Educators Act, 1998*, all school-based educators should be at school during the formal school day. Each school day should be at least seven hours that is 35 hours per five-day week.
- (2) The contact time for teaching Grades 10, 11 and 12 will be 27,5 hours per week, excluding the time allocated to breaks, assemblies and extramural activities.
- (3) The 27,5 hours of teaching contact time per week must be used as follows:
- (a) Languages: 9 hours per week, that is, 4,5 hours per week for each of the two languages;
 - (b) Mathematical Literacy or Mathematics: 4,5 hours per week;
 - (c) Life Orientation: 2 hours per week; and
 - (d) time allocation for the Group B subjects (12,0 hours): 4,0 hours per week should be allocated to each of the three Group B subjects, or a subject from Annexure C which replaces one Group B subject.

- (4) Table 21 provides a summary of the time allocations.

**TABLE 21: TIME ALLOCATION PER WEEK FOR SUBJECTS OFFERED FOR
GRADES 10-12**

SUBJECT	HOURS
Language 1	4,5
Language 2	4,5
Mathematics and Mathematical Literacy	4,5
Life Orientation	2,0
<u>Group B</u> subjects (3 x 4hours)	12,0
TOTAL	27,5

- (5) The allocated 27,5 hours per week may be utilised only for the minimum required Grades 10, 11 and 12 subjects as specified above, and may not be used for any additional subjects. Should a learner wish to offer additional subjects, an arrangement for additional time must be made for the offering of these subjects.

37. CERTIFICATION REQUIREMENTS

- (1) Subject to the provisions of *Paragraph 17A of the General and Further Education and Training Quality Assurance Act, 2001 (Act No. 58 of 2001)*, and subject to *paragraphs 27 and 29* of this document, the following certificates will be issued:
- (a) a National Senior Certificate to be issued to a candidate who has complied with the programme and promotion requirements as contemplated in *paragraphs 27, 28 and 29*; and
 - (b) a National Senior Certificate with Endorsement for Learners who Experience Barriers to Learning to be issued to a candidate who has complied with the programme and promotion requirements of a National Senior Certificate with Endorsement as contemplated in *paragraphs 34(5), (6) and (7)*.

- (2) The National Senior Certificate is a 130 credit certificate at Level 4 on the National Qualifications Framework (NQF).
- (3) In terms of this policy document the National Senior Certificate qualification must:
- (a) have a defined purpose or purposes, and is intended to provide qualifying learners with applied competence and a basis for further learning;
 - (b) enrich the qualifying learner;
 - (c) provide benefits to society and the economy;
 - (d) comply with the objectives of the NQF;
 - (e) where applicable, be internationally comparable;
 - (f) incorporate integrated assessment; and
 - (g) indicate the rules governing the award of the qualification.
- (4) The duration of the learning programme for the National Senior Certificate is three years and this culminates in the National Senior Certificate qualification at the end of Grade 12.
- (5) Subject to *Regulation 59(4) of the Regulations pertaining to the conduct, administration and management of assessment for the National Senior Certificate*, published in *Government Gazette No. 31337* of 29 August 2008, part-time candidates may also offer the National Senior Certificate. Full-time learners, repeat candidates and part-time candidates will offer subjects listed in Annexure B of this document. For this purpose full-time learners, repeat candidates and part-time candidates are defined as follows:

“A part-time candidate in the FET Phase is a candidate who has enrolled at an institution that does not offer tuition on a full-time basis and may enroll for any number of subjects in one examination sitting. Part-time candidates will continue to exist until such a date as determined by the Minister of Basic Education.”

“A full-time learner in the FET Phase is a learner who has enrolled for tuition and who offers a *National Curriculum Statement Grades R-12* programme in a full-time capacity at a public or independent school or any other registered institution and who presents seven (7) subjects in terms of the National Senior Certificate

programme requirements as contemplated in *paragraph 27* of this document. Such a candidate must fulfill all internal assessment requirements of the National Senior Certificate, including oral and practical requirements where applicable as contemplated in the Curriculum and Assessment Policy Statements of the relevant subjects.”

- (6) A repeat candidate in the FET Phase is a candidate who has failed the grade enrolled for or the National Senior Certificate examination, or who wants to improve his or her National Senior Certificate examination results, and who wants to repeat, either the grade failed or the Grade 12-year, as a full-time learner or full-time or part-time candidate respectively.

38. SUPPLEMENTARY EXAMINATIONS

A supplementary examination will be granted to a full-time, repeat and part-time candidate as contemplated in:

- (1) *Paragraph 18* of the policy document, *National policy on the conduct, administration and management of the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF)* published in *Government Gazette, No. 30048* of 6 July 2007; and
- (2) *Regulation 18* of the *Regulations pertaining to the conduct, administration and management of assessment for the National Senior Certificate*, published in *Government Gazette No. 31337* of 29 August 2008.

ANNEXURE B

APPROVED SUBJECTS THAT COMPLY WITH THE PROGRAMME REQUIREMENTS OF GRADES 10 – 12

GROUP A

TABLE A1: OFFICIAL LANGUAGES AT HOME AND FIRST ADDITIONAL LEVEL

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Afrikaans Home Language	13301002	13301013	13301024
Afrikaans First Additional Language	13311032	13311043	13311054
English Home Language	13301062	13301073	13301084
English First Additional Language	13311092	13311103	13311114
IsiNdebele Home Language	13301122	13301133	13301144
IsiNdebele First Additional Language	13311152	13311163	13311174
IsiXhosa Home Language	13301182	13301193	13301204
IsiXhosa First Additional Language	13311212	13311223	13311234
IsiZulu Home Language	13301242	13301253	13301264
IsiZulu First Additional Language	13311272	13311283	13311294
Sepedi Home Language	13301302	13301313	13301324
Sepedi First Additional Language	13311332	13311343	13311354
Sesotho Home Language	13301362	13301373	13301384
Sesotho First Additional Language	13311392	13311403	13311414
Setswana Home Language	13301422	13301433	13301444
Setswana First Additional Language	13311452	13311463	13311474
SiSwati Home Language	13301482	13301493	13301504
SiSwati First Additional Language	13311512	13311523	13311534
Tshivenda Home Language	13301552	13301563	13301574
Tshivenda First Additional Language	13311582	13311593	13311604
Xitsonga Home Language	13301612	13301623	13301634
Xitsonga First Additional Language	13311642	13311653	13311664

TABLE A2: MATHEMATICAL SCIENCES

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Mathematical Literacy	19321002	19321013	19321024
Mathematics	19331032	19331043	19331054
Technical Mathematics	19371482	19371493	19371504

TABLE A3: HUMAN AND SOCIAL STUDIES

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Life Orientation	16341002	16341013	16341024

GROUP B**TABLE B1: AGRICULTURE**

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Agricultural Management Practices	10351002	10351013	10351024
Agricultural Sciences	10351032	10351043	10351054
Agricultural Technology	10351062	10351073	10351084

TABLE B2: CULTURE AND ARTS

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Dance Studies	11351002	11351013	11351024
Design	11351032	11351043	11351054
Dramatic Arts	11351062	11351073	11351084
Music	11351092	11351103	11351114
Visual Arts	11351122	11351133	11351144

TABLE B3: BUSINESS, COMMERCE AND MANAGEMENT STUDIES

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Accounting	12351002	12351013	12351024
Business Studies	12351032	12351043	12351054
Economics	12351062	12351073	12351084

TABLE B4: OFFICIAL LANGUAGES AT SECOND ADDITIONAL LEVEL, AND NON-OFFICIAL LANGUAGES

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Afrikaans Second Additional Language	13351672	13351683	13351694
English Second Additional Language	13351702	13351713	13351724
IsiNdebele Second Additional Language	13351732	13351743	13351754
IsiXhosa Second Additional Language	13351762	13351773	13351784
IsiZulu Second Additional Language	13351792	13351803	13351814
Sepedi Second Additional Language	13351822	13351833	13351844
Sesotho Second Additional Language	13351852	13351863	13351874
Setswana Second Additional Language	13351882	13351893	13351904
SiSwati Second Additional Language	13351912	13351923	13351934
Tshivenda Second Additional Language	13351942	13351953	13351964
Xitsonga Second Additional Language	13351972	13351983	13351994
Arabic Second Additional Language	13352002	13352013	13352024
French Second Additional Language	13352032	13352043	13352054
German Home Language	13352062	13352073	13352084
German Second Additional Language	13352092	13352103	13352114
Gujarati Home Language	13352122	13352133	13352144
Gujarati First Additional Language	13352152	13352163	13352174
Gujarati Second Additional Language	13352182	13352193	13352204
Hebrew Second Additional Language	13352212	13352223	13352234
Hindi Home Language	13352242	13352253	13352264
Hindi First Additional Language	13352272	13352283	13352294

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Italian Second Additional Language	13352332	13352343	13352354
Latin Second Additional Language	13352362	13352373	13352384
Mandarin Second Additional Language	13356022	13356033	13356044
Portuguese Home Language	13352392	13352403	13352414
Portuguese First Additional Language	13352422	13352433	13352444
Portuguese Second Additional Language	13352452	13352463	13352474
Serbian Home Language	13355772	13355783	13355794
Serbian Second Additional Language	13355802	13355813	13355824
Spanish Second Additional Language	13352482	13352493	13352504
Tamil Home Language	13352512	13352523	13352534
Tamil First Additional Language	13352542	13352553	13352564
Tamil Second Additional Language	13352572	13352583	13352594
Telegu Home Language	13352602	13352613	13352624
Telegu First Additional Language	13352632	13352643	13352654
Telegu Second Additional Language	13352662	13352673	13352684
Urdu Home Language	13352692	13352703	13352714
Urdu First Additional Language	13352722	13352733	13352744
Urdu Second Additional Language	13352752	13352763	13352774

TABLE B4A: LANGUAGE WITH THE STATUS OF AN OFFICIAL LANGUAGE FOR THE PURPOSE OF LEARNING AND TEACHING AT A PUBLIC SCHOOL

SUBJECTS	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
South African Sign Language Home Language	13305932	13305943	13305954

TABLE B5: ENGINEERING AND TECHNOLOGY

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Civil Technology	15351002	15351013	15351024
Electrical Technology	15351032	15351043	15351054
Mechanical Technology	15351062	15351073	15351084
Engineering Graphics and Design	15351092	15351103	15351114
Civil Technology (Specialisation)	15351152	15351162	15351172
Electrical Technology (Specialisation)	15351182	15351192	15351202
Mechanical Technology (Specialisation)	15351212	15351222	15351232

TABLE B6: HUMAN AND SOCIAL STUDIES

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Geography	16351032	16351043	16351054
History	16351062	16351073	16351084
Religion Studies	16351092	16351103	16351114

TABLE B7: PHYSICAL, MATHEMATICAL, COMPUTER AND LIFE SCIENCES

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Computer Applications Technology	19351002	19351013	19351024
Information Technology	19351032	19351043	19351054
Life Sciences	19351062	19351073	19351084
Physical Sciences	19351092	19351103	19351114
Technical Science	19351512	19351523	19351534

TABLE B8: SERVICES

SUBJECT	SUBJECT NUMBER		
	Grade 10	Grade 11	Grade 12
Consumer Studies	20351002	20351013	20351024
Hospitality Studies	20351032	20351043	20351054
Tourism	20351062	20351073	20351084

Appendix P: Provincial circulars

Circulars relating to the provincial enactment of the NNSSF:

- 0041/2016: *Section 21 schools: norms and standards for schools Grades 1-12—financial allocation for the 2017/18 financial year.*
- 0005/2018: *Compensation for school fee exemptions.*

Circulars relating to the provincial enactment of the PAM:

- 0028/2017: *Provision of 2018 teaching staff establishments for ordinary public schools.*
- 0031/2009: *Provisioning of educators—issuing of staff establishments for 2010.*

Circulars relating to the provincial enactment of the APOPS

- 0040/2016: *Dates and timeframes for applications for admission to ordinary Western Cape Education Department (WCED) schools and management of school admission information for 2017/18.*

[Close this Minute](#)[Maak omsendbrief toe](#)[Byela emva](#)

REFERENCE: 20160922-4433
3/1/1/1/1/5

ENQUIRIES: See Paragraph 10 **TEL:** 021 467 2608/2041 **FAX:** 086 568 2858

CIRCULAR : 0041/2016
EXPIRY DATE : 31 March 2018

TO: DEPUTY DIRECTORS-GENERAL, CHIEF DIRECTORS, DIRECTORS, CIRCUIT MANAGERS, HEADS: IMG COORDINATION AND ADVICE, DEPUTY DIRECTORS AT DISTRICT OFFICES, AND PRINCIPALS AND GOVERNING BODY CHAIRPERSONS OF SECTION 21 ORDINARY PUBLIC SCHOOLS

BRIEF SUMMARY: *Particulars of the financial allocation to section 21 schools for the 2017/18 financial year and guidelines for the procurement of goods and services.*

SUBJECT: SECTION 21 SCHOOLS: NORMS AND STANDARDS FUNDING FOR SCHOOLS GRADES 1–12 — FINANCIAL ALLOCATION FOR THE 2017/18 FINANCIAL YEAR

1. Allocation

The provisional norms and standards (N&S) allocation for your section 21 school for the next three years, for the period of 01 April 2017 to 31 March 2020, is available on CEMIS and can be accessed in the following way:

- Log on to CEMIS.
- Select "**Public Ordinary**".
- **Select your school.**
- Click "Proceed". Point to the "Administration" menu item and click on "Norms and Standards Allocation ". Select "**N&S 2017/18**".
- Print the page.

Your attention is drawn to the following:

- 1.1 Allocations are calculated in accordance with the prescripts in paragraphs 108 to 114 of the National Norms and Standards for School Funding (NNSF) in [Government Gazette No. 29179](#), dated 31 August 2006.
- 1.2 According to paragraph 114 of the NNSF, Provincial Education Departments are allowed to allocate less than the indicated 2017 per learner targeted amount as per the National Table of Targets as published in Government Notice No. 12, Government Gazette No. 40065 of 10 June 2016.

After a careful assessment of our budget, the WCED will apply a 6.2% increase on the 2016 provincial table of targets. The no-fee threshold for 2017 will be R1 215.

Provincial table of targets for the school allocation Grades 1–12 (2017–2019)

	2017	2018*	2019*
NQ1 No-fee	1 215	1 313	1 387
NQ2 No-fee	1 215	1 313	1 387
NQ3 No-fee	1 215	1 313	1 387
NQ4 No-fee	1 215	1 313	1 387
NQ5 No-fee	1 215	1 313	1 387
NQ4 Fee-charging	623	656	695
NQ5 Fee-charging	215	227	240
No-fee threshold	1 215	1 311	1 387

* 2018 and 2019 (adjusted with projected inflation rate) are the projected national targets as communicated.

- 1.3 The provisional allocations were calculated based on the 2016 10th day SNAP enrolment.
- 1.4 The Western Cape Education Department (WCED) will review all schools' learner enrolments with the

2017 10th Day Survey. **Final allocation** letters will be published on CEMIS by 17 March 2017.

2. **Payment schedule**

2.1 **Schools charging school fees**

Schools will receive their N&S allocation for the 2017/18 financial year in two instalments, namely 60% in April–May 2017 and 40% in November 2017. Section 21 schools must use their first transfer payment (60%), which will be made during April–May 2017, to purchase their 2018 learning and teaching support material (LTSM) either via their own suppliers or the online ordering system so that it is available before the end of September 2017; and to pay for other expenses, as stipulated in paragraph 3.1 below. The second transfer payment (40%), which will be made during November 2017, must be used to cover appropriate school-related expenses up to 31 March 2018.

2.2 **No-fee schools**

20% of the total N&S allocation that is paid over in April–May 2017 (see paragraph 2.1 above) must be reserved to defray day-to-day operational non-personnel expenditure. Schools will be informed of this amount in the N&S allocation letter. It must be borne in mind that this amount must sustain the school until April 2018, when payment will be received for the next financial year.

3. **Use of the allocation**

- 3.1 The N&S allocation is intended primarily for LTSM, local purchases, municipal services, essential day-to-day maintenance of school buildings, grounds and equipment (non-scheduled maintenance) and other everyday expenses. Own income, as intended in paragraph 6 below, must first be used to cover shortfalls in the above regard before it is used to finance governing body posts.

It is suggested that for 2017/18 schools should divide their available allocation among the various expenditure categories as follows:

- 30% for LTSM orders for 2018, of which 10% should be targeted for library material (each learner must have a textbook for each subject). The stock of school library material should be augmented annually until the total number of items reflects the minimum international standard of 10 items per learner. See paragraph 3.1.1 below for the list of items included under LTSM.
- 20% for local purchases
- 25% for municipal services (**However, schools should budget for a larger percentage if expenditure trends necessitate this.**)
- 25% for maintenance

3.1.1 **Learning and teaching support material (LTSM)**

- a. The Department of Basic Education (DBE) defines LTSM as any material that supports and facilitates teaching and learning directly in the classroom or at home (homework). It includes the following:
 - Textbooks, readers, reference books, prescribed works, atlases and dictionaries
 - Workbooks
 - Posters, maps and wall charts
 - Educational board games
 - Library material (fiction and non-fiction), reference books, posters, and recordings on videos, DVDs, audio cassettes, CDs, CD-ROMs, multi-media, etc.
 - Computer software and licensing
 - Resource material for educators, learners, classrooms and library
- b. Schools are required to use their full LTSM allocation to purchase LTSM that will enrich and strengthen the implementation of the Curriculum and Assessment Policy Statement (CAPS) in their classes. Schools are therefore encouraged to use their LTSM allocation to purchase supplementary textbooks, prescribed works, atlases, dictionaries, workbooks, posters, maps, wall charts, educational board games, library material (fiction and non-fiction), reference books, recorded videos, DVDs, audio cassettes, CDs, CD-ROMs, computer software, consumer studies and hospitality studies and science laboratory equipment.
- c. Subject to the following conditions, schools may assign less money to LTSM if:
 - each learner in the school has a textbook for each subject and access to other LTSM resources;
 - the school has annually allocated 10% of the LTSM allocation to the purchasing of library material to augment the library stock and the total number of items in the library stock now constitutes the minimum international standard of 10 items per learner; and
 - the governing body has taken a formal decision regarding this deviation. (This decision of the governing body regarding the budget, which must be submitted at a parents' meeting, must be explained and the amount spent per learner on LTSM must be

provided. This decision must be put before the parents' meeting, whether the circuit manager supports it or not.)

d. **How to obtain LTSM:**

- Section 21 schools must obtain competitive quotations in placing their orders with suppliers of LTSM, where applicable, or submit their requests online via CEMIS when required.
- When ordering additional LTSM, schools must select all CAPS textbooks from the approved national catalogues- refer to approved national catalogues that are available on the WCED website at <http://wcedonline.pgwc.gov/branch/LTSM/index.html>
- Prescribed literature for Grade 10 study in 2018 must be selected from the DBE National Further Education and Training (FET) Literature Catalogue.
- For assistance in selecting school library material schools should contact Mr Timothy Cloete, the EDULIS Coordinator: School Library Services at tel. no. 021 957 9626. The district school library adviser and/or resource centre coordinator can also be contacted regarding the development of school libraries.

3.1.2 Municipal services

- a. The N&S allocation to schools is intended for the payment of, amongst others, schools' monthly municipal services accounts which includes electricity, water, sewage and refuse removal (availability and usage charges), but excludes the payment of property tax. As in the past, the State will pay the property tax on property registered in the name of the Provincial Government of the Western Cape (PGWC) or in certain circumstances the Republic of South Africa (RSA).
- b. Schools must still implement, amongst others, the savings measures indicated in [Annexure A](#).
- c. Eskom and most municipalities have indicated they can make prepaid electricity meters available to schools. This will enable schools to better control their electricity consumption. Schools must contact either Eskom or their local municipality, as applicable, should they want to have prepaid electricity meters installed.
- d. **Where it is established that schools are not settling their municipal service accounts, the WCED reserves the right to withhold funds from the N&S allocation to pay outstanding municipal service accounts on behalf of the schools concerned.**

3.1.3 Day-to-day maintenance

- a. Day-to-day maintenance applies to the maintenance of grounds, cleaning, renovations, repairs and/or replacement of parts of school buildings. **Regular maintenance must be carried out to prevent the deterioration of school buildings and emergency repairs resulting from neglect.**
- b. **Where the N&S allocation for day-to-day maintenance is insufficient, schools are expected to supplement the allocation from their own school funds, where necessary.** Schools must budget for their day-to-day maintenance repairs in accordance with the condition of the school building and grounds. Schools should set aside a budget amount from their annual day-to-day maintenance allocation for the maintenance of equipment used to enhance the appearance of the school grounds, e.g. servicing the lawnmower, purchasing paint for benches on the school grounds and purchasing lime and fertiliser.
- c. N&S allocations may not be used for day-to-day repairs to hostels. Such repairs should be funded from the learners' boarding fees and bursaries.

4. The N&S allocation may NOT be used for the following:

- **Remuneration of governing body employed personnel**
- **New buildings**
- **Hostel expenditure**
- **Loans to individuals or other institutions**
- **Vehicles**

5. Major emergency repairs

In terms of paragraph 97 of the NNSSF, the WCED accepts responsibility for major emergency repairs to buildings, subject to the availability of funds budgeted for such eventualities. The following repairs will be considered according to the procedures in [Circular 175/2000](#):

CATEGORY A

Serious damage as a result of natural disasters, structural problems and fires.

The WCED will accept responsibility for such emergency repairs only if the cost exceeds R10 000 **and the maintenance allocation budget is exhausted**, provided that sufficient funds are available.

The WCED will, at its own discretion, consider making a transfer payment for the materials in relatively **less serious** cases.

6. **Own income**

In terms of section 36(1) of the [South African Schools Act \(SASA\), 1996 \(Act 84 of 1996\)](#), governing bodies must take all reasonable steps to supplement the resources supplied by the State in order to improve the quality of education provided by the school **to all learners at the school**. Although no-fee schools may not charge compulsory school fees (including registration fees), they are encouraged to seek voluntary contributions (donations) and engage in fundraising activities.

7. **Reporting**

7.1 The approved budget of the school must be submitted to the relevant district office by 01 December of each year.

7.2 All schools must submit a [WCED 043 form](#) (biannual report) to the relevant district office within 30 days of the end of the quarter (expenditure up until 30 June and 31 December). **Funds will be paid over to schools only if satisfactory WCED 043 reports on the financial activities of previous quarters have been received.** Furthermore, section 43(5) of the SASA requires schools to submit (for the attention of the relevant district director) a copy of their set of audited financial statements (in terms of section 43 of the SASA) for the previous financial year by 30 June of each year.

8. **Further conditions**

8.1 The governing body must exercise proper control over revenue and expenditure, as set out in the *Manual: Basic Financial System for Schools, issued by the Head of Department in terms of section 38(1) of the SASA*. Should the members of the governing body not have the necessary expertise to carry out this function, they must co-opt someone who will be able to assist them.

8.2 All school funds, obtained both from the State allocation and own income, must be used for purposes directly connected with education, as stated in section 37(6) of SASA, including the acquisition of LTSM. In terms of WCED policy, textbooks and readers may not be photocopied as this is tantamount to infringement of the Copyright Act, 1978 (Act 98 of 1978).

8.3 The WCED has the right to inspect records relating to school funds and to act against any member of staff or the governing body should he or she be involved in the mismanagement of school funds. Schools must, therefore, keep all proof of income and expenditure for this purpose.

9. **2016/17 allocation**

All outstanding WCED 043 forms for section 21 schools must be submitted **on or before Friday, 24 February 2017**, to prevent the forfeiture of unpaid funds.

10. **Contact numbers for enquiries**

Subject	Name	Telephone no.
WCED 043 biannual reports and audited annual financial statements	District Office Deputy Director: Corporate Services	Applicable district office
Transfer payments to schools (N&S allocations)	Ms M Paulsen	021 467 2271
Emergency repairs	Mr GP Nieuwoudt	021 467 9347
eLearning EDULIS Coordinator: School Library Services	Mr C Walker Mr T Cloete	021 467 2351 021 957 9626
General enquiries: Norms and standards (excl. transfer payments)	Mr L Sangqu Ms A Bakubaku Mr L van Wyk	021 467 2608 021 467 2041 021 467 2658

Fax no.:

086 731 8900

SIGNED: BK SCHREUDER
ACTING HEAD: EDUCATION
DATE: 2016:09:27

Grand Central Towers, Lower Parliament Street, Private Bag X9114, Cape Town 8000
Please quote reference numbers in all correspondence
Employment and salary queries: 0861 92 33 22
Safe Schools: 0800 45 46 47

The following documents relate to this circular. *Adobe Acrobat Reader®* is required to view / print these documents.

Click on a title below: the document will open in *Acrobat Reader®* where you can save and/or print a copy.

To return to this circular, click on the *WCED Online* logo at the top of the screen.

[South African Schools Act \(SASA\), 1996 \(Act 84 of 1996\)](#) (size: 255 KB)

[Government Gazette 29179](#) (size: 891 KB)

[Annexure A: Savings on municipal services](#) (size: 23 KB)

WCED Forms:

The following form is in **Excel®** format.

To save it for later use, click on the "zipped" link below and follow the instructions.

If you have **Excel®** installed on this computer, click on the "XLS" link below (the form will open in a separate window: to return to this circular, close that window)

[Form WCED 043: Quarterly Report](#) ("zipped" version, size: 33 KB)

[Form WCED 043: Quarterly Report](#) ("XLS" version, size: 57 KB)

 go up

[Close this Minute](#)

[Maak omsendbrief toe](#)

[Byela emva](#)

[Close this Minute](#)[Maak omsendbrief toe](#)[Byela emva](#)

REFERENCE: 20180123-8521
12/2/8/11/1

ENQUIRIES: R Dawson
L Sangqu **TEL:** 021 467 2700/2608 **FAX:** 021 467 2594

CIRCULAR : 0005/2018
EXPIRY DATE : NONE

TO: DEPUTY DIRECTORS-GENERAL, CHIEF DIRECTORS, DIRECTORS, CIRCUIT MANAGERS, HEADS: MANAGEMENT AND GOVERNANCE, DEPUTY DIRECTORS AT DISTRICT OFFICES, AND PRINCIPALS AND CHAIRPERSONS OF GOVERNING BODIES OF ALL ORDINARY PUBLIC SCHOOLS

BRIEF SUMMARY: *Particulars of compensation for school fee exemptions and guidelines for the claims process (ordinary public schools only).*

SUBJECT: COMPENSATION FOR SCHOOL FEE EXEMPTIONS

1. The National Minister of Basic Education issued the regulations for the payment of compensation for school fee exemptions to fee-charging schools in national quintile 4 and 5 schools in [Government Gazette No. 33971](#), dated 28 January 2011.
2. Compensation for school fee exemptions will always be for the previous school year, e.g. compensation paid in 2018 is for exemptions granted during the 2017 school year.
3. The following exemptions from the payment of school fees will qualify for legal claims:
 - 3.1 A learner who is automatically exempted as he or she is an orphan or has been abandoned by his or her parents.
 - 3.2 A learner for whom a poverty-linked state social grant is paid.
 - 3.3 A learner whose parents applied for an exemption from the payment of school fees which was granted by the governing body (note that the application and minutes of the relevant governing body meeting must be available for school auditing purposes).

4. Timeframes

Schools must finalise the compensation for fee exemptions process by 29 June 2018. All claims should be finalised on CEMIS according to the process outlined in this circular by 31 May 2018, to allow sufficient time for the auditing process mentioned in paragraph 6. No late submissions will be accepted. Each application will be validated by the district office and submitted to Head Office for payment. Payments will then be made to qualifying schools on or before 15 November annually.

Dates for the 2018 process (school fee exemptions granted during 2017):

Date	Action
03 April 2018	CEMIS made available for capturing data
31 May 2018	Final capture date for schools
29 June 2018	Schools submit audited information to the relevant circuit manager at the district office and closure of CEMIS for all schools
31 August 2018	District offices finalise validation process and sign off on Eduinfosearch
28 September 2018	WCED informs schools of the amounts to be awarded
15 November 2018	WCED transfers funds to qualifying schools

5. Process

All applications must be submitted via CEMIS.

The minimum information needed for the application will be the school name, EMIS number, street address of the school, which is pre-populated and to be provided by the school, the name and the contact details of the person who completed the form, total number of learners enrolled at the school, list of learners exempted from payment of school fees in the previous year and the learner ID (CEMIS number) of each of these learners.

The process is as follows:

- Log on to CEMIS.
- **Select "Public Ordinary".**
- **Select school.**
- Click "proceed" then hover over the "Administration" menu item and click on "School fee exemption" and click "Capture Screen".
- Select the learner and complete the % exemption granted (only for learners being claimed). The enrolment period will be automatically populated. Complete and print the claim. Submit to the relevant people for signatures, i.e. finance committee chairperson, principal and governing body chairperson.
- Submit to the auditor, together with supporting documentation for auditing. Refer to paragraph 6 of this circular.
- After the audit, submit the printout (claim) to the relevant district office for validation. Signed-off copies must be kept for record and audit purposes by the school and district office. All supporting documents should be kept at the school. Do not send any documents to Head Office.
- Upon validating the claim, circuit managers must make a print out of the validated claim on Eduinfosearch. These records are to be reserved at the district office in case of enquiries from Head Office.

6. Auditing

Appendix B of the Government Gazette includes the guidelines for the auditor. The following documents must be submitted to the auditor:

- Final departmental allocation of norms and standards for the applicable year.
- Audited financial statements for the applicable year.
- Learner attendance registers for the applicable year.
- Snap Survey for the applicable year.
- Exemption application forms and documents in support of application for each exempted learner (including proof of foster care and social grant data where applicable).
- Documentation approving the exemption for each exempted learner.

The auditor must use the documents to verify the correctness of the information provided.

Where supporting documentation is available in electronic format only, the auditor must request access to the information.

The auditor must complete and sign the applicable section on the application form.

All non-compliance and incorrect information identified during the audit process must be indicated. All necessary amendments must be done by the circuit manager during the verification process.

The Western Cape Education Department (WCED) will not accept an application which the auditor did not sign or where the auditor has questioned the validity of the application.

The applications must be audited as part of the annual audit of each school.

The audited application form must be submitted to the circuit manager at the district office.

All information received will be subjected to a validation process by the WCED. If any information is found to be fraudulent, the applying school will be subjected to a sanction, which may include disciplinary action against the principal who verified the information and/or recovery of any payment made. Late submission (i.e. after 29 June 2018), incomplete information, altered information, incorrect information and information submitted in an incorrect format will render the application invalid. The original, completed application form (not a copy) must be submitted. Please note the WCED will only accept CEMIS-provided application forms.

7. Calculation

Upon the completion of the validation process, the WCED will determine the total value of claims received, thereafter schools will be informed whether they qualify and the amounts they will receive.

The amount a school receives per learner will be calculated as follows:

- Period (number of days enrolled during the year)
- Percentage exemption
- Per learner norms and standards allocation
- No-fee threshold (R1 243 for 2017)

Examples of calculations:

Learner ID	Days enrolled	Percentage exemption	N&S allocation	Calculation for 2017
1	200	100%	623	$200/200 \times 100\% \times (1\,243 - 623) = 620$
2	100	50%	623	$100/200 \times 50\% \times (1\,243 - 623) = 155$
3	150	50%	623	$150/200 \times 50\% \times (1\,243 - 623) = 233$

The WCED will be able to determine if 100% of a school's claim can be paid only once all claims have been received and the total amount has been determined. This total amount will be subjected to the total annual budget available for this intervention. Funds will be transferred to qualifying schools on or before 15 November during the year in which the application is made.

- Kindly note that this circular replaces **Circular 0004/2017**.
- Any enquiries about the completion of the application form can be directed to the circuit manager at the relevant district office.

SIGNED: LJ ELY
ACTING HEAD: EDUCATION
DATE: 2018:01:29

Grand Central Towers, Lower Parliament Street, Private Bag X9114, Cape Town 8000
 Please quote reference numbers in all correspondence
 Employment and salary queries: 0861 92 33 22
 Safe Schools: 0800 45 46 47

The following documents relate to this circular. *Adobe Acrobat Reader®* is required to view / print these documents. Click on a title below: the document will open in *Acrobat Reader®* where you can save and/or print a copy. To return to this circular, click on the *WCED Online* logo at the top of the screen.
[Government Gazette 33971](#) (size: 220 KB)

 go up

[Close this Minute](#) [Maak omsendbrief toe](#) [Byela emva](#)

[Close this Minute](#)[Maak omsendbrief toe](#)[Byela emva](#)

REFERENCE: 20170818-4020
3/1/3/1

ENQUIRIES: Circuit Managers **TEL:** 021 467 2000 **FAX:** 021 483 7658

CIRCULAR : 0028/2017

EXPIRY DATE : NONE

TO: DEPUTY DIRECTORS-GENERAL, CHIEF DIRECTORS, DIRECTORS, CHIEF EDUCATION SPECIALISTS, CIRCUIT MANAGERS, PRINCIPALS OF PUBLIC ORDINARY SCHOOLS AND MEMBERS OF GOVERNING BODIES

BRIEF SUMMARY: *Provision of 2018 teaching staff establishments for public ordinary schools.*

SUBJECT: PROVISION OF 2018 TEACHING STAFF ESTABLISHMENTS FOR PUBLIC ORDINARY SCHOOLS

1. Teaching staff establishments for 2018

Please refer to Western Cape Education Department (WCED) [Circular 0031/2009](#), dated 28 August 2009, for a full description of the legislation and measures applicable to the annual issuing of teaching staff establishments to schools. The said circular can be accessed on the WCED's website under circulars 2009. The contents of that circular remain applicable to 2018, except for the following amendments:

- 1.1 In terms of the measures of the Revised Post Distribution Model, public ordinary schools and public special schools must be issued with their annual teaching staff establishments by 30 September of the preceding year. Thus, for the 2017 academic year, all teaching staff establishments issued to public ordinary and public special schools (as well as all additional posts created for and issued to a public school in 2017 as a result of either increased learner enrolment or the curriculum needs of the school) will expire on 31 December 2017.
- 1.2 The teaching staff establishments for 2018 will be published on the Central Education Management Information System (CEMIS) under the link Administration (Establishments) on 25 August 2017.

2. Additional allocations (Post Level 1 posts)

This office is obligated to review the allocation of the 2018 teaching staff establishment if any information about a school, as contained on CEMIS, is found to be incorrect.

3. Revision of 2018 teaching staff establishments

- 3.1 Schools may request a review of the computation of their teaching staff establishment if the CEMIS learner enrolments reflected on the teaching staff establishment letter differ from the learner data on 31 July 2017. In order for this office to carry out the computation, the school will have to submit evidence to the Directorate: Strategic People Management that the learner enrolment used and stated in the teaching staff establishment letter is incorrect. In addition, schools which indicate that they have sufficient classrooms and have enrolled or intend to enrol additional learners for 2018 may apply for additional posts. Applications have to be submitted during the period 28 August 2017 to 15 September 2017, and all applications must be done on CEMIS. Applications for additional posts will only be considered if it is completed on CEMIS.
- 3.2 In the event that a school phases out a grade or grades, its teaching staff establishment will be revised, based on the number of learners remaining at the school. In the case of learners moving out of the school with the phasing out of a grade or grades, the teaching staff establishments of the receiving school(s) will be revised.

4. Recalculation of teaching staff establishment owing to change in learner enrolment during 2018

- 4.1 The WCED reserves the right to abolish Post Level 1 posts if there is a drop in the school's learner enrolment in the course of 2018. In such cases, teachers appointed in a temporary capacity will be transferred, after consultation, to posts at other schools. Therefore, when recruiting teachers on a temporary basis, principals have to inform applicants that they will be appointed on the understanding that they may be transferred to other schools if their posts are abolished as a result of a drop in learner enrolment at the school.

- 4.2 All contract appointments are to be made for 12 months if it is against an additional contract post granted to the school for 12 months. These nominations are to be submitted to Head Office through the Contract Appointment Tracking (CAT) system.
- 4.3 Contract appointments against permanent vacant posts are to be made for a period of six months, if the school qualifies for such a post. If the same post is still vacant after six months it should be filled by the same incumbent provided his or her performance is satisfactory.
- 4.4 All schools are called upon to update their enrolment totals on CEMIS by Tuesday, 06 March 2018. The teaching staff establishment of all those schools where learner enrolment is less than their learner enrolment on 31 July 2017 will be recalculated by 23 March 2018. If the school is to lose a post or posts, then the number of contract appointments equal to or fewer than the number of posts the school loses, will be reviewed accordingly from 01 April 2018.
- 4.5 In cases where there is an increase in learner enrolment from 17 January 2018 to 31 January 2018, the school may apply online, during the period 15 January 2018 to 31 January 2018, for (a) growth post(s). The learner enrolment total taken into consideration will be the enrolment total on CEMIS at the time of application. Only applications submitted on CEMIS will be considered.

District offices are called upon to ensure that all schools have submitted their applications online by 31 January 2018.

- 4.6 Principals' attention is drawn to the following:
- Nominations for teachers in additional posts, applied for as a result of the growth and/or curriculum needs of the school, may be made only after written approval has been granted by Head Office.
 - teacher may not commence with her/his duties prior to the approval granted for an additional post by Head Office.

5. **Filling of advertised posts**

- 5.1 All posts that have already been advertised in a WCED vacancy list may be filled permanently, provided that those posts appear on the 2018 teaching staff establishment.
- 5.2 Should an advertised post not appear on the 2018 teaching staff establishment, the school is not entitled to that post and such a post will be regarded as erroneously advertised.
- 5.3 The stipulation that an advertised post (particularly a promotion post) may be filled only if it does not create an additional excess teacher, remains in place.
- 5.4 Should the school principal and the governing body be of the opinion that the post description of the advertised post no longer meets the curriculum needs of the school, they may request this office to regard the post as erroneously advertised. A detailed explanation, signed by both the principal and the chairperson of the governing body, is to accompany such a request.
- 5.5 To ensure stability in 2018, the WCED envisages using the conversion process to fill Post Level 1 posts for appointment on 01 January 2018. Where posts have been captured for advertising in Vacancy List 02/2017 and the school has identified a suitable teacher who can be converted from temporary to permanent status, the advertisement can be removed from the vacancy list.

6. **Filling of vacant substantive teacher posts (based on teaching staff establishments of 25 August 2017)**

- 6.1 The Department is still experiencing financial constraints on the Compensation of Employees (CoE) budgets for the 2017/2018 to 2019/2020 medium-term expenditure frameworks. One of the strategies explored in 2017 was to reduce the impact on CoE expenditure by effectively managing the utilisation of excess teachers, which included the lateral transfer of teachers between schools with vacancies and utilising excess teachers where curriculum challenges were experienced.
- 6.2 The department will again implement measures and monitor closely the effective management and utilisation of excess teachers in 2018. The following actions will be taken within the timeframes identified:

Intervention activities

Timeframe

All teachers who cannot be absorbed on the 2018 teaching staff establishments for 2018 are formally declared in excess. 01–30 September 2017

Districts identify suitable posts for teachers declared in excess for placement in 2018 and consult principals/governing bodies on the placement of excess teachers. Formal placement letters are to be issued to teachers who can be matched and placed against vacant substantive posts for 2018. 01–31 October 2017

Districts provide list of “unplaceable” excess teachers to Head Office for cross-district placements.	31 October 2017
Head Office makes recommendations to districts for cross-district placements.	01–30 November 2017
Formal placement letters issued to teachers who can be matched and placed against vacant substantive posts for 2018.	01–30 November 2017
Excess teachers who cannot be matched and placed are not to form part of the school’s timetable for 2018.	10 December 2017
In the event that schools require additional teachers due to growth in learner numbers, districts will consult principals/governing bodies on the placement of excess teachers. Formal placement letters will be issued to teachers who can be matched and placed.	15 January 2018

- 6.3 Teachers who have already been declared in excess, based on previous teaching staff establishments and in accordance with previous processes, and who are still in excess, retain their in-excess status. These teachers will be dealt with in terms of the prevailing collective agreements of the Education Labour Relations Council (ELRC).

- 6.4 Permanently appointed teachers are to be identified as in excess in terms of Collective Agreement 4 of 2016 of the ELRC.

- 6.5 Efforts to place excess teachers will continue during the 2018 academic year in the event that teachers leave the service of the WCED and the excess teacher profile meets the curriculum needs of the vacant teacher post(s).

6.6 **Appointment of new entrants**

Another strategy to curb costs on the CoE budget is to appoint new entrants to the education profession in the WCED instead of teachers who are already remunerated at high salaries. In so doing, we will also make provision for new teachers to enter the employ of the WCED.

A **new-entrant teacher** is defined as a final-year student and/or any suitably qualified teacher who graduated in the past three years and who has never been employed by the state. This group includes Funza Lushaka bursary holders.

At the same time, we acknowledge that schools should have the ultimate choice to recruit the best person for their school. In order to ensure that we balance the different interests, if principals and governing bodies have strong objections to the appointment of such new entrants at their schools, they are invited to approach the Head of Education directly in writing (copying the relevant District Director) and await the outcome of their petition. Such petitions should be submitted at least two weeks before the teacher is to assume duty to allow for proper consideration of each case.

6.7 **Other suitably qualified teachers**

Only qualified teachers with an REQV 13 or higher qualification may be considered for vacant substantive teacher posts. This office will consider the employment of other teachers only if no qualified teachers can be identified from the aforementioned categories.

7. **Filling of additional teacher posts (based on applications for growth and curriculum needs between 28 August 2017 and 15 September 2017)**

- 7.1 Preference for the filling of additional teacher posts will be given to teachers in the following order:

- Excess teachers
- New-entrant teachers
- Other suitably qualified teachers

Only qualified teachers with an REQV 13 or higher qualification may be considered for vacant and additional teacher posts. This office will consider the employment of other teachers only if no qualified teachers can be identified from the aforementioned categories. Applications for the appointment of temporary teachers in the following categories do need prior approval from the Director: Recruitment and Selection:

- a. Teachers over the age of 65 years;
- b. Teachers that exited the employ of the state due to:
 - Retirement
 - Resignation
 - Ill health
 - Misconduct

- Abscondence

- c. Foreign teachers;
- d. Unqualified and underqualified teachers.

- 7.2 District offices may approve transfers to schools in cases where the transfer will promote the process of redeployment, i.e. where the transfer will bring about the redeployment of an excess teacher to a vacant substantive post. This measure also applies in cases where the transfer will allow for a new-entrant teacher to be appointed in the post vacated as a result of the transfer.

8. **Enquiries**

All enquiries pertaining to this circular and the relevant legislation should be addressed to circuit managers.

9. **General**

Please bring the contents of this circular to the attention of all teachers and members of the governing body.

SIGNED: BK SCHREUDER
HEAD: EDUCATION
DATE: 2017:08:24

Grand Central Towers, Lower Parliament Street, Private Bag X9114, Cape Town 8000
Please quote reference numbers in all correspondence
Employment and salary queries: 0861 92 33 22
Safe Schools: 0800 45 46 47

[Close this Minute](#) [Maak omsendbrief toe](#) [Byela emva](#)

Enquiries: Circuit Team Managers
Telephone: As per Education District
Fax: As per Education District
Reference: 7/1/B
 20090828-0038



Wes-Kaap Onderwysdepartement
Western Cape Education Department
ISebe leMfundo leNtshona Koloni

CIRCULAR : 0031/2009
 EXPIRY DATE : NONE

TO: DEPUTY DIRECTORS-GENERAL, CHIEF DIRECTORS, DIRECTORS, CHIEF EDUCATION SPECIALISTS, CIRCUIT TEAM MANAGERS, IMG MANAGERS AND HEADS OF EDUCATIONAL INSTITUTIONS

BRIEF SUMMARY: *Provision of staff establishments for 2010 (accompanied by the 2010 staff establishment for each educational institution)*

SUBJECT: PROVISION OF EDUCATORS - ISSUING OF STAFF ESTABLISHMENTS FOR 2010

1. BACKGROUND

- 1.1 As prescribed by legislation, the Member of the Executive Council for education has consulted both the employee parties to the Provincial Education Labour Relations Council (PELRC) in this province and the recognised school governing body associations in this province on the basket of affordable educator posts available to education institutions under the auspices of the Western Cape Education Department (WCED). He has increased the number of affordable educator posts for 2010 by 322, compared with the number of posts that were available in 2009. Of these 322 posts, 140 posts are earmarked for inclusive education and 112 posts for reducing the learner:educator ratios in the Foundation Phase in the poorest schools of the province.
- 1.2 The staff establishments of ordinary public schools have been determined in terms of the revised post-provisioning norms approved by the Heads of Education Committee in 2007 and the latest changes to the Grade 12 curriculum. The weightings in Grade 12 have changed as a result of the changes to the Grade 12 curriculum implemented in 2009 for the first time.
- 1.3 Prior to 2005, staff establishments for the special public schools were issued every 3rd year, but, since 2005, staff establishments to said sector have been issued annually.
- 1.4 As prescribed by legislation, the WCED has consulted both the employee parties to the PELRC in this province and the recognised school governing body associations in this province on the staff establishments of ordinary public schools and special public schools.

2. MEASURES (BROAD PRINCIPLES)

2.1 POST STRUCTURE

The post structure and descriptions contained in Collective Agreement 4/2003 of the Education Labour Relations Council (ELRC) are applicable to educator staff establishments. Your attention is drawn to the fact that the resolutions contained in the Occupation Specific Dispensation for Educators (Collective Agreement 1 of 2008 of the ELRC) do not have any impact on the staff establishments for public schools for 2010.

2.2 SCHOOL GRADINGS

Schools are graded according to the School Grading Norms contained in Collective Agreement 3 of 2006 of the ELRC. Please also see paragraph 2.1 above.

2.3 EXPIRY OF POSTS ON 31 DECEMBER 2010

- 2.3.1 In terms of the measures of the Revised Post Distribution Model (RPDM), ordinary public schools and special public schools must be issued with their annual educator staff establishments before the end of September of the preceding year. Thus, for the 2010 academic year, all educator staff establishments issued to ordinary public schools and special public schools, (as well as all additional posts created for and issued to a public school during 2009 and 2010 as a result of either increased learner enrolment or the curriculum needs of an education institution), expire at the end of 2010.

2.3.2 The additional posts (over and above the posts reflected in the fixed educator staff establishment



REFERENCE: 20160725-2628
2/19/2

ENQUIRIES: LR Abrahams **TEL:** 021 467 2364 **FAX:** 021 483 7658

CIRCULAR : 0040/2016
EXPIRY DATE : 31 December 2018

TO: DEPUTY DIRECTORS-GENERAL, CHIEF DIRECTORS, DIRECTORS (HEAD OFFICE AND DISTRICT OFFICES), CIRCUIT MANAGERS, PRINCIPALS AND CHAIRPERSONS OF GOVERNING BODIES

BRIEF SUMMARY: *This serves to inform ordinary schools of the timeframes for applications for admission to the Western Cape Education Department (WCED) schools and the management of school admission information for 2017/18.*

SUBJECT: DATES AND TIMEFRAMES FOR APPLICATIONS FOR ADMISSION TO ORDINARY WESTERN CAPE EDUCATION DEPARTMENT (WCED) SCHOOLS AND MANAGEMENT OF SCHOOL ADMISSION INFORMATION FOR 2017/18

1. The demand for learning places at schools in the Western Cape continues to grow annually. In order to manage admissions effectively schools are required to adhere to the following timeframes for admissions.
2. The measures outlined in this circular apply to applications received in **2017** for admission to ordinary public schools in **2018**.
- 2.1 Common dates for admission allows the WCED to be able to plan more efficiently for the provision of classrooms, staff establishments, procurement of LTSM and all other systemic interventions required to ensure that schools are ready to start each year.
- 2.2 This also serves to make the process more accessible to parents who wish to apply to Western Cape schools.
- 2.3 Schools are required to adhere to the following WCED admission timeframes which will be **applicable to all ordinary public schools**:

Activity	Date
Schools capture planned enrolment on SAMI	30 January 2017
School admissions open (all ordinary public schools)	06 February 2017
School admissions close (all ordinary public schools)	24 March 2017
Parents are informed of the outcome by letter	03 May 2017
Parents confirm acceptance	30 June 2017
Schools fill available places	3 rd Term 2017

3. **Capture of school's admission information for 2017 on the WCED School Admissions Management Information (SAMI) system**
- 3.1 Please be advised that in the case of an admissions appeal, dispute or a legal challenge, schools may be required to provide the details of the application such as when and how the application was processed. The details will then be taken from the SAMI system as the official WCED admissions information database.
- 3.2 Schools are therefore required to capture **ALL applications** received on the SAMI system.
- 3.3 Due dates for capturing admissions information on SAMI:
 - 3.3.1 SAMI opens for planned enrolment: 20 January 2017
 - 3.3.2 Schools sign off planned enrolment: 30 January 2017
 - 3.3.3 Schools capture all applications received on SAMI: 06 February – until all places are filled
 - 3.3.4 Schools indicate the outcome of applications on SAMI: 28 April 2017