UNIVERSITY OF CAPE TOWN

Faculty of Humanities
Department of Education

School Culture and Pedagogic Practice: A case study of two schools

A dissertation presented in partial fulfilment of the requirements for the degree of

Master of Philosophy of Education
(Teaching)

by

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April 2002

I hereby declare that this dissertation is my own unaided work and that all sources of reference have been acknowledged. This dissertation is submitted in partial fulfilment of the requirements for the degree of Master of Philosophy in Education at the University of Cape Town. It has not been submitted before in whole, or in part, for any degree or examination at any other university.

Signed by candidate

This 2 day of April 2002

ACKNOWLEDGEMENTS:

A number of people have played an invaluable role in supporting and guiding me during the writing of this thesis.

A heartfelt thank you to my supervisor, Ms. Heather Jacklin, who is unfailingly supportive and generous with her time and wealth of knowledge. She is the embodiment of the teacher I wish to become.

I am indebted to many lectures for their encouragement during both the course work component of this degree and during the writing of this dissertation – Mr. Chris Breen; Professor Kevin Rochford, Professor Johan Muller and Professor Crain Soudien.

Mr. Henry Davids, Ms. Ingrid Thom and Mr. Chris Kleinsmith are also held in warm regard for their administrative assistance and encouragement throughout this process.

My thanks are also extended to my colleagues at work for their continued support and assistance; for always showing an interest and being willing to listen to the my complaints.

My family, extended family and friends who have encouraged me to remain firm in my convictions. They have been a tower of support during this trying time and I thank them sincerely for their on going and constant support and consideration. Also, thank you to Mr. Neville Morgan for his careful prove-reading of this document.

Most especially, to Mr. Bishen Morgan who has cleared my path throughout this journey. For holding my hand, listening to my troubles and always making my load lighter.

ABSTRACT :

This study examines ways in which school culture shapes teacher's repertoires of pedagogic practices by regulating selection from wider individual and collective reservoirs.

The study argues that school culture can be understood in terms of four mutually constitutive dimensions. These can be grouped into institutional structure (comprised of social structure and the structuring of time and space) and communication (comprised of meanings and values, and access to pedagogic knowledge).

The study focuses on the ways in which each dimension of school culture, as well as the patterns of coherence which emerge across these dimensions, influence pedagogic practice.

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APPENDICES

CHAPTER ONE: INTRODUCTION

This study aims to understand how the pedagogic choices of teachers are shaped by the school's culture. A comparative multiple case study of two schools examines how culture works differently in each school and explores ways in which the pedagogic repertoires of the teachers are shaped differently at each school.

RATIONALE FOR THE RESEARCH:

This study is the result of a personal interest. I developed this interest when I noticed my pedagogic practices had changed when I changed jobs from teaching mathematics and science at one school to mathematics at another school. Tacitly I understood the cultures of the schools to be different and I questioned how this worked to shape the choices I made regarding my own pedagogy. My interest in understanding how school culture shapes pedagogic practices at each school differently has produced the following question.

Question:

How does school culture shape the individual pedagogic repertoires of teachers?

Sub Question:

To what extent do teachers draw on a wider individual or collective reservoir to constitute their repertoires?

Chapter Outlines:

Chapter One introduces the question and provides the rationale for this study.

Chapter Two provides a survey of relevant literature. The study draws on Pepper (1995) and Stoll (cited in Prosser 1999) in order to understand school culture and the way it shapes pedagogy. The conceptual framework for this study is developed. This is then translated into an analytical framework which explains how the categories and definitions for analysis were arrived at.

Chapter Three describes and justifies the case study approach adopted in the study. I discuss how selections were made regarding the data collecting methods and the selection of the participants in the study. Concerns about validity, reliability and generalisability are also addressed.

Chapter Four presents a data analysis. This is organised according to the analytic framework in chapter two.

Chapter Five identifies insights that emerge from the data analysis. In this chapter the insights are discussed in relation to each school with a focus on associations between the privileged pedagogic practices at each school and each dimension of culture.

CHAPTER 2: LITERATURE REVIEW

This literature review locates the study within educational debates and a particular theoretical tradition. The literature relates to the way culture shapes the ways in which teachers construct their pedagogic repertoire. More specifically it focuses on factors that influence teachers to expand their own pedagogic reservoir or to draw on a wider collective reservoir through collaboration. The ways in which school culture encourages or constrains collaboration and a theoretical understanding of school culture are explored. The conceptual framework is then arrived at and thereafter the analytic framework is developed.

The importance of contextual factors in shaping pedagogy:

There is much disagreement in the educational literature concerning whether the determining factors in the construction of pedagogy are contextual or not. Grant and Sleeter (1985:218) present the view that teachers themselves play a large role in determining their work. They claim that literature about contextual factors shaping practice exempt teachers from taking responsibility for their part in determining what and how to teach. Through textual analysis they determine the main situational factors thought to shape teaching to be bureaucratic and organisational procedures, colleagues, technical culture, curriculum resources and materials, students' characteristics and behaviour, parents and community, administration, and the teachers' life experiences and backgrounds. They argue that when these factors are not

exerting pressure on teachers, the teachers' social conceptions of themselves and the purpose of education determine their pedagogy.

Hatton (1987:55-60) highlights what she views as three flaws in Grant and Sleeter's work (1985). Firstly, she suggests that while situational factors may not be seen to act strongly on the pedagogic practices of teachers in the classroom at the time of Grant and Sleeter's study, these factors had had strong influence at an earlier stage in the teachers' experience and the effects are still evident at the school. Secondly, she uses the teachers' social conceptions of themselves as evidence for her argument. She argues that the teachers are regarded, even by Grant and Sleeter (1985:55) as "socially and culturally conditioned agents". This argument indirectly contradicts Grant and Sleeter's claims of situational conditions not impacting on pedagogic choice, as they have not taken into account how the context has shaped the perceptions and culture of these agents of choice. Thirdly she argues that situational pressures are exerted on the teachers in the study which are not taken into account by Grant and Sleeter (1985:56) such as the structure of the school day and the preparation time for lessons as well as the literature and content of the curriculum.

The literature relating to the ways in which context shapes pedagogy identifies two types of contextual factors that act on teachers' pedagogic choice. These I have called extrinsic factors, which are the factors produced by the culture of the school, and intrinsic factors, which are produced by the teachers' own prior educational experiences.

Intrinsic and extrinsic factors that shape pedagogy:

As discussed above, Hatton (1987:) argues that teachers' earlier exposure to situations as a teacher or a learner shape their present conceptions and understandings of teaching. Denscombe (1982), as cited in Hatton (1987:56), argues, "traditional teaching constitutes a powerful demonstration of competence to pupils, colleagues, and administrators". He also suggests that there are covert goals in pedagogy that come from the dynamics of the classroom and are believed to be achieved by traditional teaching methods. This shared experience of traditional teaching influences what teachers believe their work to be. Hatton (1987:57) uses as evidence the fact that the principal of the school in Grant and Sleeter's study in no way regarded the teachers as incompetent even though he overtly advocated change and they had not adjusted their teaching strategies in accordance with what he claimed he wanted to achieve. Both the teachers and the principal seem to draw on experience as a guide to what constitutes competent practice.

The covert acceptance and belief that traditional teaching methods are a reflection of competence is hard to change because of the educational experiences of teachers who were taught through the use of this pedagogy. As teachers are products of an education in which traditional teaching methods were used, they identify with this pedagogy and understand it to produce good results. This undermines the need to change pedagogy as it reaffirms teachers' self-concepts. This becomes problematic in that it does not allow the pedagogy to change with a change in circumstances, and teachers are unable to adapt to the changing needs of learners. This becomes

compounded by time constraints and other pressures such as increasing numbers of learners with difficulties, which makes little allowance for teachers to reflect on their practice, either as a group or individually.

In short, teachers' own experiences as learners and prior teaching experience shape the way in which they understand their workplace. These factors, which have been called intrinsic factors, are personal to the individual teacher. Extrinsic factors can be described as the pressure the school culture exerts on teachers to conform to certain norms at the school.

School culture: The role of extrinsic factors in determining whether teachers work in isolation or collaboratively

Rosenholtz (1989) draws on organisational theory to view the school as a workplace for teachers. Her aim is to determine which factors to take into account in determining how the structure of a school relates to its functioning and its productivity, in order to derive a definition of an effective school. She argues that effective schooling encompasses more than just learner achievement; it includes the workings of the schools' social organisation.

Rosenholtz's beliefs are in agreement with Hatton's findings; people come to understand the realities of their workplace through a set of shared assumptions about appropriate attitudes and behaviours constructed within them. This means that for teachers to change the way they think about their teaching, they need interaction with the principal or other colleagues about experiences, to expose them to other interpretations and insights into

situations that arise. While interaction with all colleagues is important, the perspectives of those in authority carry more weight.

Rosenholtz (1998) relies on the "threatened self-esteem model" to explain why teachers and principals choose strategies which highlight the positive aspects of their practice and mask their shortcomings and uncertainties in order to protect their social and self worth and maintain the illusion of being in control. This also helps one to understand why teachers' pedagogic choices conform to the dominant values and beliefs about how to be a competent teacher and explains why they act in ways that will perpetuate this trend. She concludes that the need to perpetuate this trend causes resistance to changing classroom practices and the school culture as a whole. She focuses on the idea of collegiality and collaboration; tests its association to other aspects of the social organisational life of the school, and offers it as the answer to obtaining effective schools.

Rosenholtz's (1998) work suggests that the way teachers' perceive their workplace is determined by the intrinsic and extrinsic factors to which they were and are exposed. The extrinsic factors that act on teachers are the meanings of the members of organisation that they belong to.

Collaboration and pedagogic choices:

The extrinsic and intrinsic factors discussed above allow teachers to make sense of the environment in which they work. The way that teachers understand their workplace and their role in the workplace is influenced by the relationships they have with other teachers, their own individual intrinsic factors, the contextual extrinsic factors in the workplace, and the social

structuring of the school. All these factors affect the ways and the extent to which teachers collaborate.

Working relationships - collaboration versus isolation:

Little and McLaughlin (1993) examine the tension that lies between the policy initiatives which encourage teachers to play an essential role in their growth and development and those that remove total control in the classroom out of their hands. A dichotomy exists between initiatives that encourage teachers to grow and develop as professionals in a community of learners, and initiatives that encourage the removal of control over classroom pedagogic choice out of the hands of these professionals. For them there is a tension between two central issues which determine school and classroom life: on the one hand teachers work in isolation and teachers have autonomy in the classroom, while on the other they are encouraged to share experiences as a community of professionals. Little and McLaughlin concern themselves with answering questions framed around how, and to what extent, autonomy and collegiality both have a place in schools, and more importantly to our discussion, what constrains and encourages these types of interactions.

Huberman (1993) raises some pertinent questions regarding the constraints of collegiality. Looking at the organisation and structure of the school, divided up into separate classrooms with each grade separate from the next, he asks if this is not better than team teaching a large group of learners with a limited number of adults. He continues by questioning teachers' status as professionals if they are not awarded the same rights as other professionals, like doctors or lawyers. He suggests that as professionals

teachers have the right to "functional autonomy, loose supervision, and little codification of what constitutes acceptable practice". He highlights the difficulties in adapting content and time requirements to the needs of learners when collaborative and integrated work is being done.

Huberman (1993) highlights how unrealistic it is to expect teachers with different likes and dislikes to work together like a family, interpreting and criticising one another without bias. In his view, teaching a lesson requires the teacher to continually assess the needs of learners during the lesson and modify the activity accordingly. Each teacher has his or her own style, routine behaviour and methods of assessment during a lesson, depending on the class dynamic and the teacher's experiences. The question is: how would collaborative teaching accommodate this? Teachers' instructional styles are another bone of contention. The meaning or usefulness of an action may not be immediately accessible to the observer, as it would be highly personalised and may lead to distinctly varied accounts of the same lesson.

This argument suggests that since teachers have individual styles, they are not able to recognise the purposes in each other's pedagogic actions, and that pedagogic practices are so personal that their meanings are lost to observing teachers. However, other theorists, such as Olsen and Wenger, believe that shared meanings that are forged over time in a group, allow teachers to interpret each other's actions.

Olsen (1997:15-20) questions whether knowledge can be separated from the knower. Her concept of "centrality of voice" identifies how an utterance in conversation is not only a disclosure of an idea, but also a disclosure of the speaker. She contributes the understanding that through

conversation people make their understandings known, and while this causes a certain vulnerability to speakers through exposing their understandings, it also generates shared understanding between members of the group.

Wenger (1998:82) identifies with the idea of shared understandings existing between members of a group. He speaks about repertoire as being a shared group resource used to negotiate meaning within the group. He sees a repertoire as being a characteristic of a community of practice which includes "routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions or concepts that a community has adopted or produced in the course of it's existence". Repertoire here is viewed as negotiated commonly understood by all teachers who function as a part of the group.

Impact of intrinsic and extrinsic factors on collaboration:

Practice is extremely personalised, and not easy to discuss, partly because of its personal nature and also because of the difficulty in conveying and interpreting the meanings of events in the classroom.

Rumelhart (1980) as cited in Prosser (1999) discusses how pre-service teachers construct their practice. He offers schema theory as an explanation, and argues that new teachers pick and choose strategies from what they are exposed to in their teacher education and their own experiences as learners. Their new experiences as teachers force them to modify their beliefs and understandings in accordance with the situation. The way teachers are portrayed in popular culture provides validation for these new teachers' understanding of what they believe teaching is about. These are the intrinsic factors, which are acted upon when teachers are employed by a new school;

their beliefs and experiences about what constitutes teaching are brought into question by exposure to the school's culture (extrinsic factors) as teachers are socialised into this new culture. This means that the extrinsic factors provide new teachers with an understanding of what is viewed as competence in their new environment and impacts upon the teachers' concepts of themselves and their own teaching and conduct. This could limit the teachers' choice of pedagogy, as they may not feel empowered to share their own understandings or ideas within a collaborative approach.

Rosenholtz (1998) examines how the definition of competence at a school affects the teachers' self-concepts and affects their ability to share. In her view, schools with a narrow definition of competence put teachers' self esteem and the esteem of peers at risk when teachers share experiences that do not comply with the school's definition of competence. At schools with broader definitions of competence, where diversity is valued, teachers do not experience the same risk. She argues that interactions between teachers are essential as only in this way are teachers exposed to other viewpoints and the experiences of other teachers.

Authority structures and collaboration:

Hargreaves' (1984) work in Little and McLaughlin (1993) provides a distinction between terms like individuality and individualism. Individuality is associated with personal choice and individualism is regarded as an avoidance of working with others. Hargreaves criticises literature that suggests that collegiality is preferable to individualism in the education reform movement and explores alternative definitions of individuality. Lukes (1973)

and Hargreaves (1994) suggest individuality relates to personal independence and self-realisation. This relates to what Schön (1983) as cited in Olsen (1997:16) describes as the actions of a professional: to exercise personal discretion and have initiative and creativity in making decisions about one's work. This is a demonstration of empowerment.

Clement and Vandenberghe (1999:3-10) once again deal with the issues raised by Hargreaves (1990; 1993), McLaughlin (1993) and Huberman (1993) regarding the tension between collegiality and autonomy. They identify variants of collegiality and autonomy to examine the impact these variants have on teachers' professional development. They agree with these theorists that both collegiality and autonomy form an important part in a healthy professional community, which embraces diversity at all levels. Their viewpoint is that a well-designed organisation allows for the tension. " Good organisational design of the tension between autonomy and collegiality creates professional challenges" as it creates different types of learning opportunities for the teachers involved. Their theory of "the circular view on autonomy and collegiality", suggests that if teachers have the ability to work alone sometimes, it makes them more able to work collaboratively at other times and vice versa. This viewpoint has important implications for professional development as it becomes clear that when teachers are empowered to choose their pedagogy and all choices are respected, teachers will choose the type of pedagogy that is most suitable to the content and dynamics of the lesson. The teachers' ability to use their discretion in making a choice makes them more open to the opinions and learning experiences of

other teachers when reviewing their own practices as they feel they are part of a community of professionals.

Buendi'a (1999:3) highlights the link between power and the social construction of pedagogic practices. He finds evidence to support his understanding that "while relations of power legitimate, they can also interconnect to silence, or relegate as inconceivable and unarticulatable, particular pedagogic conceptions". He reaches this understanding from a study he conducted about how networks of relationships between the state, co-operating teachers, the teacher education program in the United States of America as well as the study subject's own perceptions and understandings of teaching affected the construction of the teacher's pedagogy. He focuses on the power that is evident in the structuring of the social relationships of an institution. He also acknowledges that it is not only the relationships within an institution that shape the construction of a teacher's identity but also other societal conceptions.

Wilson and Cooligan (1996:99-103) provide another way of looking at the power relations that act on teachers when selecting and accomplishing tasks in a manner that is meaningful to them. They distinguish between high and low self-empowered teachers to compare their attributes when working with colleagues and a principal in a school. They discuss how managerial theorists adopt an extrinsic power perspective, which is one in which empowerment involves having power or control over others. Their findings indicate that principals and other members of management play an important role in teacher empowerment within organisations, as they are able to limit or promote the self-empowerment of teachers in lesser roles of authority.

Maeroff (1988a cited in Wilson and Cooligan 1996:100) explains, "teacher empowerment has to do with (teacher's) individual deportment not their ability to boss others. It is the power to exercise one's craft with confidence and to help shape the way the job is done". It relates to the ability of teachers to make choices about matters pertaining to their work. Kanter (1983) and Thomas and Velthouse (1990) as cited in Wilson and Cooligan (1996:99-100) claim that "high self empowered leaders would encourage commitment, risk taking, and innovation" to develop empowerment in the organisation.

Power relations and pedagogic autonomy:

Writers such as Dalin (1998:80-92); Leithwood, Begley and Cousins (1992:4-10); Preedy (1993:141-162) and Fullan (1992:82-96) provide a useful commentary on the types of relationships that are formed as a result of the actions of school leaders and managers. Teachers are more likely to experiment if management supports this. Such experimentation would not only develop the individual reservoirs of teachers but the reservoirs of other staff and support the development of networks outside the school.

On the other hand, Wasley (1994) agrees with Clement and Vandenberghe (1999) that traditional procedures, policies, and roles will severely restrict experimentation by teachers.

School culture:

Prosser (1999) defines organisational culture as social glue. To him culture is the unifying force behind organisations, which gives rise to all school

projects and gives meaning, direction and possibility to school members who are socialised into the culture.

Theories that aim to explain how school (or organisational) culture is constituted generally focus on the ways in which meaning, or communication, and social structures relate to culture.

Hatton: Culture and Structure are separate.

Hatton (1987:59) differentiates between culture and structure in a way often found in the literature. For Hatton, culture is equated to communication while structure is described as a container for communication. As a container for communication, structure holds all the understandings and meaning making processes of the members of the organisation. In this view structure is not a part of school culture.

Pepper: Communication (culture) is part of Structure.

Using McPhee (1985,1989), Pepper (1995) redefines ideas about structure and communication. He understands communication to be equivalent to the action of organising and this organising process to be the action of an organisation. He concludes that organisations are thus communication events. One organises according to a set of beliefs and values and when these beliefs and values are shared they can be called culture.

Pepper (1995) views structure as being an unstable component of an organisation. He understands structure as a communication event, which implies that structure is associated with communication and changeable as understandings change. He identifies two dimensions of structure, the formal

dimension (which is comprised of "the buildings, offices, hierarchy, job titles, and benefit packages") and informal beliefs (comprised of "values, assumptions, true leadership and conflict"). This informal dimension leads to structure being viewed as negotiated as it depends on the understandings of the members of the organisation, which are culturally based, such as working relationships, experiences and interpretations and power relations. Put more simply, the ideas produced from the sense making processes of members of an organisation find form in the structures they put in place.

Stoll: Culture and Structure are interdependent.

Stoll (in Prosser 1999) also makes the connection between culture and structure, and finds them to be "interdependent" on each other. The focus of her study is on structure in the form of time, space and roles and responsibilities. She provides examples of how the association between structure and culture operate. An example provided by her is that if within a school's culture, interactions between teachers are highly valued then the timetable would reflect this by allowing teachers adequate time to interact through either time-tabled meeting times or adequate provision of free periods to facilitate interactions.

In contrast to Pepper (1995), Stoll (1999) looks at existing structures to see how they impact on the culture and asks the questions about how the structure affects the culture rather than just how the structures are shaped by the culture. What this suggests is that both the culture and the structure have a feedback effect on each other, as culture is a dynamic shaped by the

informal belief component of structure, and limited by certain aspects of the formal structure.

The relationship between culture and structure as viewed by Stoll suggests a particular understanding of how change would operate at a school. Understandings about a particular aspect of the school might change and this would change members' understandings about the structures and in turn change the structures. Similarly, the structures at a school may change and this would affect members' understandings about these structures and cause the meanings and values of the members to change.

Andy Hargreaves (1984) as cited in Hatton (1987:59) shares this understanding, in what he labels as two possible strategies to bring about change: "cultural interruption" and "structural redefinition". He defines "cultural interruption" as raising the consciousness of the teachers and making them aware of other possibilities, but acknowledges that this on its own is not likely to bring about change. "Structural redefinition" is defined as modifying the material circumstances of the occupation by changing the structures that produce and reproduce this culture. This strategy is thought to be enough to bring about change on its own, but seems to be under investigated.

In Pepper's view, bringing about change requires both cultural interruption and, through cultural interruption, structural redefinition as the understandings about the structures change. This provides the key to looking at an organisation through its communication and using this as a link to the culture and the structure of the organisation.

Communication and Structure in this study:

This study draws on Peppers' understanding of structure as above, but what he calls the informal dimension of structure, other theorists refer to as culture and I refer to as communication in this study.

A summary of the key points from the literature survey:

The following five points summarise the key points discussed in the literature review, which are relevant to this study.

1. Pedagogic choice is rooted in extrinsic, contextual factors as well as intrinsic factors that relate to the experiences of the individual teacher.

2. Contextual factors can be understood as dimensions of school culture.

3. The social structure, a dimension of the school culture, influences teachers' ability to make decisions and how they understand their role in the school.

4. Meanings, values and the patterning of communication flows also constitute a dimension of culture, which influences teachers' ability to make decisions and their understanding of their role in the school.

5. School culture plays a role in determining if teachers work in isolation or collaboratively. This is central to the focus of this study on the access teachers have to pedagogic knowledge to allow them to make choices regarding what constitutes their repertoires.

CONCEPTUAL FRAMEWORK:

This conceptual framework explains how the literature is interpreted and used for the purpose of this study.

Why social structure and communication?

This study is premised on Stoll (1999 cited in Prosser) and Pepper's (1995) understanding that a dynamic relationship exists between structure and meaning, which is evident through communication events of members of the organisation. The values and beliefs of the members of the organisation shape the formal dimension of structure and the structure also influences values and beliefs.

Structure affects teachers' beliefs about how to be competent teachers and therefore influences the relationship between the repertoire and the freedom teachers have to make selections from their individual reservoirs and the wider, collective reservoirs.

I use the word repertoire in this study as a collection of pedagogic practices, which the individual teacher actively uses in the classroom. This collection is selected from an individual reservoir, which is comprised of all the methods of which the teacher is aware as possibilities, but which are not actively being used to construct practice.

Reservoir is a concept that refers in this study to the possible pedagogic practices from which an actively used repertoire is selected. The concept of a reservoir is the idea of holding methods in reserve, as they do not constitute everyday practice for the teacher, but rather a collection of

possibilities of that could be used. An individual reservoir constitutes only a fraction of the possible wider collective reservoir that exists in the department as a whole, or even the still wider possible reservoir of all the teachers in the school.

There are various layers of reservoirs very much similar to the layering in an onion bulb. Each individual teacher has a reservoir from which their active repertoire is established, although in some cases where a teacher's pedagogy is constantly shifting through experimentation, the repertoire and reservoir can be regarded as the same thing. This reservoir is part of the wider reservoir of the department, which is in turn part of the wider reservoir of the school. The development of individual repertoires and reservoirs are very much dependent on the culture of the school, and the collegial interactions and external stimuli in the forms of conferences and new textbooks, which are provided. I have refrained from addressing wider pedagogic reservoirs outside of the school, as my study is only of one department within each school.

The institutional social structure:

The institutional social structure refers here to the way the school is organised. This includes the distribution of positions of authority.

This study adopts the definitions provided by Wilson and Cooligan (1996:99) of extrinsic power, teacher empowerment and self-empowerment. These terms indicate the relationship of members with authority to those with less authority. Understanding of the role of the principal and other members with authority in developing empowerment in other members in the school is in accordance with Kanter (1983), Thomas and Velthouse (1990) cited in

Wilson and Cooligan (1996:99-103). The study draws on the understanding that the self-empowerment the leadership in an organisation enjoys, has an impact on the levels of empowerment of its teachers and thus on their ability to make individual choices regarding their pedagogy. This notion of high empowered leadership includes allowing teachers to play a role in the decision-making regarding their own development as well as regarding general matters within the school and accepting experimentation and change.

Communication between members of the school:

Prosser (1999) and Rosenholtz (1998) contribute the understanding that teacher's define their role in the school, and what it means to teach, through the set of shared understandings within the school. These shared understandings or assumptions about appropriate attitudes and behaviours act as what Prosser (1999) calls social glue, binding the teacher to make pedagogic choices which conform with the dominant values and beliefs about how to be a competent teacher within the specific workplace structure.

The understanding provided by Rosenholtz (1998) about the breadth of the definition of competence at a school is relevant to this study. It is understood to affect teachers' self-concept and their ability to share their knowledge and experiences with other teachers. At a school with a wide definition of competence, teachers are more likely to have a broader repertoire unconstrained by the threat of losing self-esteem by not complying with a privileged style of teaching. At a school with a single privileged pedagogy and thus a narrow definition of competence, teachers will constrain their repertoire to adopt the privileged pedagogy and not risk the loss of self

worth. When competence has a narrow definition in the form of perhaps a privileged pedagogy, ideas disclosed by a teacher may not adhere to the dominant understanding and consequently the teacher suffers a loss of esteem with peers. A further influence is Rosenholtz's (1998) understanding of the "threatened self esteem model". I use the terms self-concept and self-esteem to indicate the teacher's perception of their self worth and their perceived ability to fulfil the expectations they feel are imposed on them by the school and members in positions of authority.

I will refer to "buying into the culture" of a school to indicate an acceptance and sharing of the values of the school. "Buying into the culture" of a school would necessarily be evident in the pedagogy of the classroom and the types of social interactions.

Pedagogy and collegial interactions:

Pedagogy is the term I use to indicate the way teachers conduct lessons in the classroom. This definition does not include the response from the learners, although this response does influence pedagogic choice.

In this study no value judgement has been made regarding the types of pedagogy used at the schools, as this is irrelevant to answering the research question. I have chosen to focus my study on the influence of cultural factors on the way in which teachers construct their repertoires. The literature suggests that to a large extent, choice of pedagogy is dependent on the teachers being "socially and culturally conditioned agents" (Grant and Sleeter 1985). This means that previous exposure to concepts of teacher competence does play a role in the conceptions of teacher, but just like the pre-service

teachers in Buendi'a's (1999) study they will adjust their practice to fit in with the school's culture. This means that teachers assimilate their prior learning into the understandings of popular culture and the new concepts of teaching to which they are exposed and piece together a repertoire which complies with the ideas about competence at school.

I will refer to the situational factors of the organisation that act on the teacher as extrinsic factors while the experiences and beliefs the teacher was exposed to before entering their current place of employment are referred to as intrinsic factors. Pepper (1995) establishes the link between the informal structure of the organisation and the teacher's culture by explaining that the negotiated part of structure includes working relationships, experiences and interpretations as well as power relationships. The focus of my study is grounded on these negotiated aspects in order to look at the structure of schools.

The social relationships that are of interest to me are those between teachers, and between teachers and management, sometimes referred to as collegial relationships as I view them to be determined by what is viewed as competence in the culture of the school. Collegial relationships can be defined as either collaborative or autonomous, and although there are many definitions of these terms that imply value judgements, I do not use them for this purpose. In this study these terms are simply used to describe behaviour.

Collegial interactions in this study are defined as being either institutional, official, work related interactions or personal, unofficial and non-work related interactions. Institutional, official, work related interactions happen during the school day and refer to interactions within the boundaries

of the school regarding work. Personal, unofficial and non-work related interactions refer to the personal dimension of interactions between teachers, which is not often explored in the literature. Huberman (1993) does address personal relationships as a barrier to collaborative work and peer assessment.

Collaborative work in the study is understood to provide opportunities for discussion about practice, which allows teachers to shape their ideas and develop coalitions with like-minded colleagues to collaborate on specific ideas or tasks, through story telling and scanning for ideas; asking or providing aid and assistance; and participating in shared and joint work (as described by Little, 1990).

In this study I use the definitions provided by Hargreaves (1993) as cited in Clement and Vandenberghe (1999) for types of autonomy. I primarily refer to what he calls "strategic individualism", which I refer to as isolation, and "elective individualism," which I refer to as autonomy.

ANALYTIC FRAMEWORK:

This analytic framework has been constituted using an iterative approach between the conceptual framework and a close initial reading of the data to define categories for analysis of the data. The conceptual framework provided the initial groundwork that informed data collection. In general terms, I have looked at culture in terms of:

1. The institutional structure of the school, through the ways in which it grants power to its members (authority structure) and organises time and space.
2. Communications between members of the school, to gain an understanding of the basis on which access to knowledge is granted to some members, and the meanings and values of the members of the school.

The institutional structure:

This study looks at the social structure of the school and the structuring of time and space at the school. The social structure incorporates the formal hierarchy that determines who makes decisions about different aspects of the school. The ways in which time and space are structured are defined into categories relative to routine time use and the time made available to teachers.

Communication within the school:

The study addresses shared meanings and the processes through which teachers have access to pedagogic knowledge. Shared meanings between the principal and teachers with regard to competence and aims of the school are considered. Access to knowledge is addressed regarding the processes through which teachers are provided with access to each other's pedagogic reservoirs and the extent to which access is granted.

The diagram on the following page represents the analytic framework. The headings in the diagram provide categories used for analysis of the data.

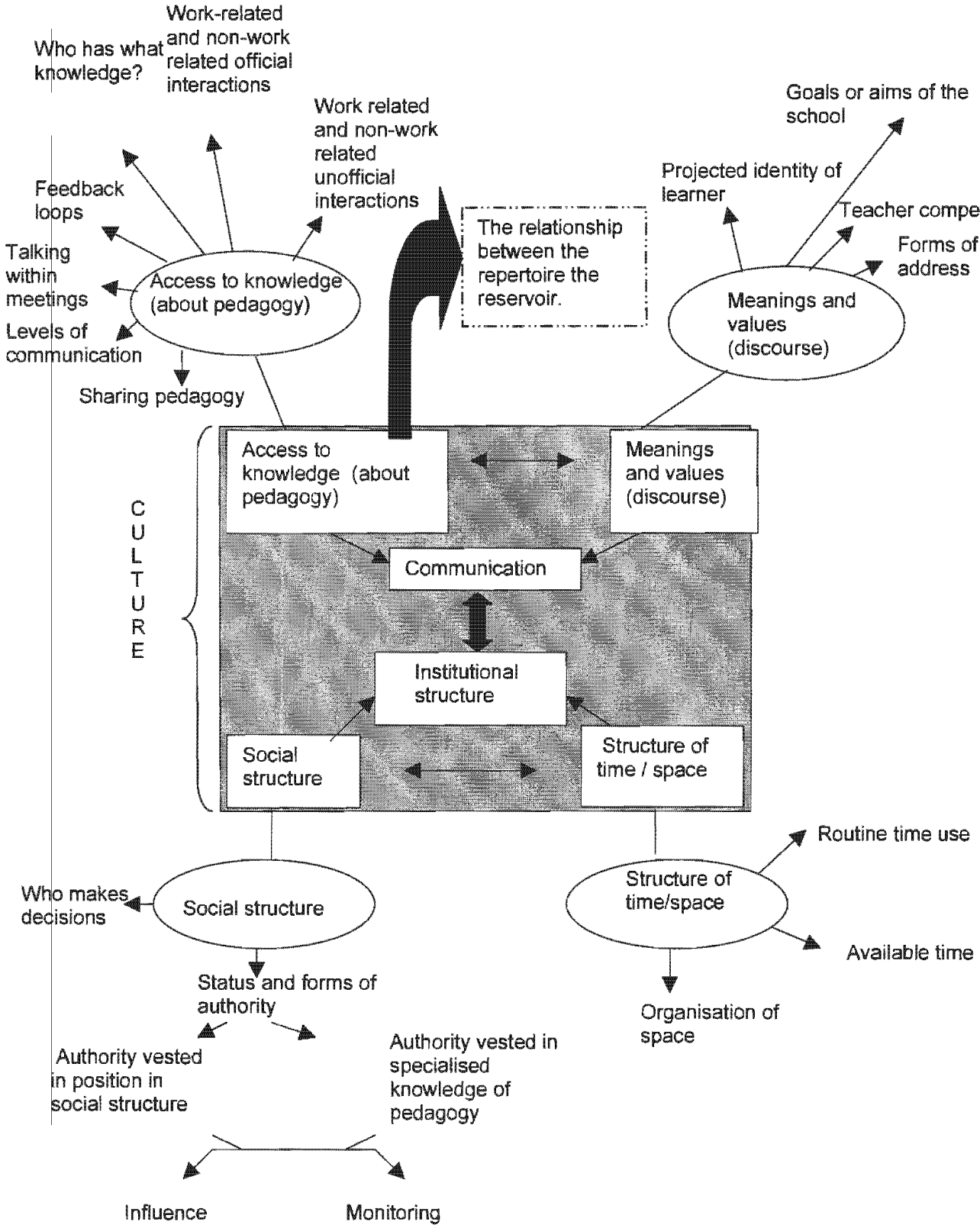


Diagram One: Analytic Framework – The dimensions of culture are mutually constitutive.

CHAPTER THREE – METHODOLOGY

The focus of this study is on school culture which is not only contextually embedded but, it may be argued, is context. The methodological approach which best lends itself to this focus is the case study. In this case, a multiple comparative case study was adopted. The data was collected using observation and systematic interviewing to understand the culture of each school and how it shapes the selections teachers make from the reservoir of possible methods to constitute their repertoires.

Using a case study presents certain concerns regarding validity, reliability and generalisability, which are addressed later in this chapter.

The requirement for case study research is that multiple methods are used to collect the data to ensure that the data gives a fair representation of the situation. Yin (1994) suggests that both direct observation and systematic interviewing should be employed in collecting data for a case study. In this study, classroom teaching and meetings were observed, and the principals, the heads of the mathematics departments and two mathematics teachers at each school were interviewed. Tracking the two mathematics teachers at each school supported these methods.

Comparison is at the heart of the question as the study focuses on comparing how the different cultures in each school result in different pedagogic practices. To gain comparable data the method used was repeated in each school, with slight adjustments to accommodate the realities of the schools.

Selection of Schools:

The schools were chosen partly for opportunistic reasons, and also for the differences and similarities between the schools. As a teacher, I have had the experience of working in both schools and have intimate knowledge of their cultures and a fair idea of the pedagogic practices at each school. This created an awareness of how different the culture and the pedagogy of the teachers are at each school. Both schools are part of the same education system with the same syllabus and general time structure, and both aim to prepare learners to attain general education and training certification at the end of grade nine. The study focuses on the general education and training band to make the data comparable, as there is a slight difference in that one school is a high school providing schooling for grades eight to grade twelve learners while the other is a middle school that provides only grade seven to grade nine. Further similarities between the two schools are that they are both socio-economically advantaged with one being a private school and the other a former model C school.

Selection of department:

To limit the scope of the study, the mathematics department within each school became the focus. The choice of department was opportunistic, as I have had experiences in working within the mathematics department of each school. An advantage gleaned from this is that there is common ground between the members the mathematics departments and myself in terms of knowledge of the subject and experiences with teaching this subject.

Selection of teachers:

Within the mathematics department at each school two teachers became the specific focus as there were only two teachers available at Inheritance High. While these teachers became the focus, any teachers they interacted with during the course of their workday or teachers who had influence over the work of these teachers also became a part of the study. The head of the mathematics department at both schools was also interviewed but in the case of Inheritance, one of the teachers who participated was also the head of department. The criteria for teachers as participants were that they taught both grades eight and nine mathematics, and had been teaching at the school for a minimum of two years to ensure that they are entrenched in the culture of the school. To ensure comparability, the gender composition of the selected teachers from each school, was the same.

Data collection:

A range of data collection strategies was used as is normally required for case studies. In this study the principals, the heads of the mathematics departments and two teachers from each school were interviewed. The interviews with the teachers were supported by one day of classroom observation and tracking each. Further observations were done of staff meetings and departmental meetings within the period of the study.

Each participating teacher was observed teaching even though the data from this was not used in the analysis. The purpose of these

observations was to provide the researcher and the teacher with common events to refer to during the interview, as they could discuss a particular method used with a certain class rather than just having to generalise. Relevant points of discussion from this method arose around other ways the teacher uses to teach this same content, how teachers select particular methods from their repertoires for particular classes, and whether they are aware of other methods which they have not tried. Classroom observations lasted for one day with each teacher, during which the teachers' actions were tracked during any non-teaching time. Tracking was useful in obtaining an understanding of the culture as expressed through the social structure and discourse used by members of the staff as well as forms of address between members of the staff and the work related and non-work related interactions of the staff members.

The day with each teacher ended in an interview. The focus was the social structure of the school and the way it shapes work and non-work related interactions, the ways in which time and space are structured including specific information about how they are notified about meetings and the way in which these meetings are conducted. Teachers were also asked about how much information was available to them regarding decisions made about pedagogy. These teachers were specifically questioned about how they felt their work was influenced by the social structure of the school. These interviews provided information about levels of communication, who talks about what in meetings and the responses of other members and about how pedagogy is shared at each school, or reasons why this does not always happen.

The heads of departments were interviewed about the structuring of the department socially and in terms of the way time and space are used, specifically in relation to the way in which the department is run and the opportunities for pedagogic discussion. Other areas discussed in the interviews related to the head of department's role in the social structure of the school and department including issues of access to knowledge, specifically about pedagogy and the way in which the social structure shapes the work related and non-work related interactions of the members and insights about how departmental meetings are conducted.

The principal was interviewed regarding the institutional structure comprising of the social structure, meanings and values of the school, the basis on which access to pedagogic knowledge is granted and the general running of the school as well as how social structure shapes work related and non-work related interactions.

The purpose of observing meetings was to observe the social structuring in the departments and the school as a whole, as well as the role of these meetings as forums for pedagogic discussion and shared meaning making. They provided data about their purpose, the structuring of authority as well as its expression in forms of address, the meanings and values of members expressed discursively and members' access to pedagogic knowledge as well as information about informal and formal relationships of the teachers at each school. General meetings were observed at both schools in the form of two morning meetings at each school and an additional, routine

full staff meeting at Progress Private School[1]. Inheritance High School[2] does not have routine staff meetings in addition to morning meetings. A departmental meeting was observed at School but not at Inheritance High School as the staff were not able to provide information as to when the next one would happen as they are not notified by the principal prior to these meetings; the meetings are unpredictable and irregularly spaced.

The following list summarises data collection strategies and schedules used:

List of methods:	**Schedules**
• Observe lessons (x 2) in each school	Classroom observation
• Interview teachers after the lessons	Teacher follow up interview
• Track the teachers being observed	Tracking observation
• Observe departmental meetings	Department meeting observation
• Interview the head of department	Head of department interview
• Observe staff meetings	Staff meeting observation
• Interview the principal	Principal interview
(See appendix 1 for all schedules)	

[1] Progress Private School is a made up name to protect the identity of the school.
[2] Inheritance High School is a made up name to protect the identity of the school.

Generalisability, Reliability and Validity:

Generalisability:

This study has aimed to build theory about how the culture of schools shapes the pedagogic practices of the teachers within the schools by using a multiple case study. As such it makes no claims about the empirical generalisability of the data in terms of statistical testing or systematic generalisations to a wider population. Instead, the contribution of this case study is to develop theory that is generalisable.

Reliability:

The reliability of the study is based on the consistency of interview data from multiple sources, including the teachers, the principals and the heads of the mathematics departments.

Validity:

Maxwell (1992) suggests four categories or definitions of validity which I have used to guide this study.

Descriptive validity addresses the "factual accuracy" of the account. In the study, concerns about validity were met by tape recording all interviews with the teachers, heads of departments and principals. A range of data was collected and each question was asked of more than one person in order to ensure that data from different sources concur. Every attempt was made to

describe events and actions as accurately as possible to fully capture the perspective of the interviewees.

Theoretical validity as described by Maxwell (1992) addresses the theories researchers form and take into studies as well as the theories they develop during a study. How valid is the case study as a basis for developing theory relating to this question? The concern here is whether the methodology used is suited to the question. In terms of this study, the focus of the question is firmly grounded in the literature. The literature provided theoretical insights, which are located in a particular theoretical tradition, and which guided the methodological approach, data collection and data analysis.

Yin (1994) deals with theoretical validity in a slightly different way. He addresses the validity of theories researchers take with them into studies. In this study, the initial conceptualisation of the question is based on an extensive literature review. This conceptualisation is revised and elaborated on the basis of data analysis.

Evaluative validity refers to applying some framework that evaluates the objects of the study or their actions, but is not of concern to this study as the researcher makes no claims or value judgments in the course of the study but instead aims to build an explanation.

Interpretative validity deals with researcher showing the perspective of the objects of the research as well as their communicative meanings rather than interpreting the data on the basis of the researcher's categories and understandings. The accounts of knowledge from interviews in this study, are based on the meanings of the participants and through repeatedly quoting interviewees responses in the analysis and conclusion chapters, I have tried

to express their ideas. Their discourse is sampled in both chapters and I have included their basic actions in terms of laughter or whispering.

Positioning of the researcher:

I worked at Inheritance High for about six months under the former head of department. Of the current department members I had previously worked with only the current head of department as the other teachers were appointed later. I currently work at Progress Private School where I have been teaching mathematics for three years.

Of the six teachers in the mathematics department only one has changed in the past five years that I have been Progress Private School. My observations about the pedagogy at the two schools being different resulted from my own experiences at the schools and how I found myself teaching differently at each school. This I related to the different cultures at each school as I experienced them. I decided to try to build an explanation through case study of how the culture shapes the pedagogy at each school differently.

Having worked in each department does not necessarily undermine the validity of this study. Maxwell (1992) explains that it is to his advantage that he is able to draw on his own practice and understanding of that practice as a researcher. I make the same claim, as I have worked in the mathematics departments in both schools and have found my insights and tacit understandings useful as areas for investigation, but have relied on the data to support these understandings, rather than presuming them to exist. The evidence for this comes from the interview data rather than from observations and is usually from more than one source at each school. An example of this

is the view that the purpose of departmental meetings at Inheritance High School does not prioritise pedagogic discussion. This view was supported by the head of the mathematics department who said it was time for her to provide the other teachers with information; she admitted that pedagogy would not normally be discussed unless it came up as part of another discussion. The other teacher interviewed confirmed this.

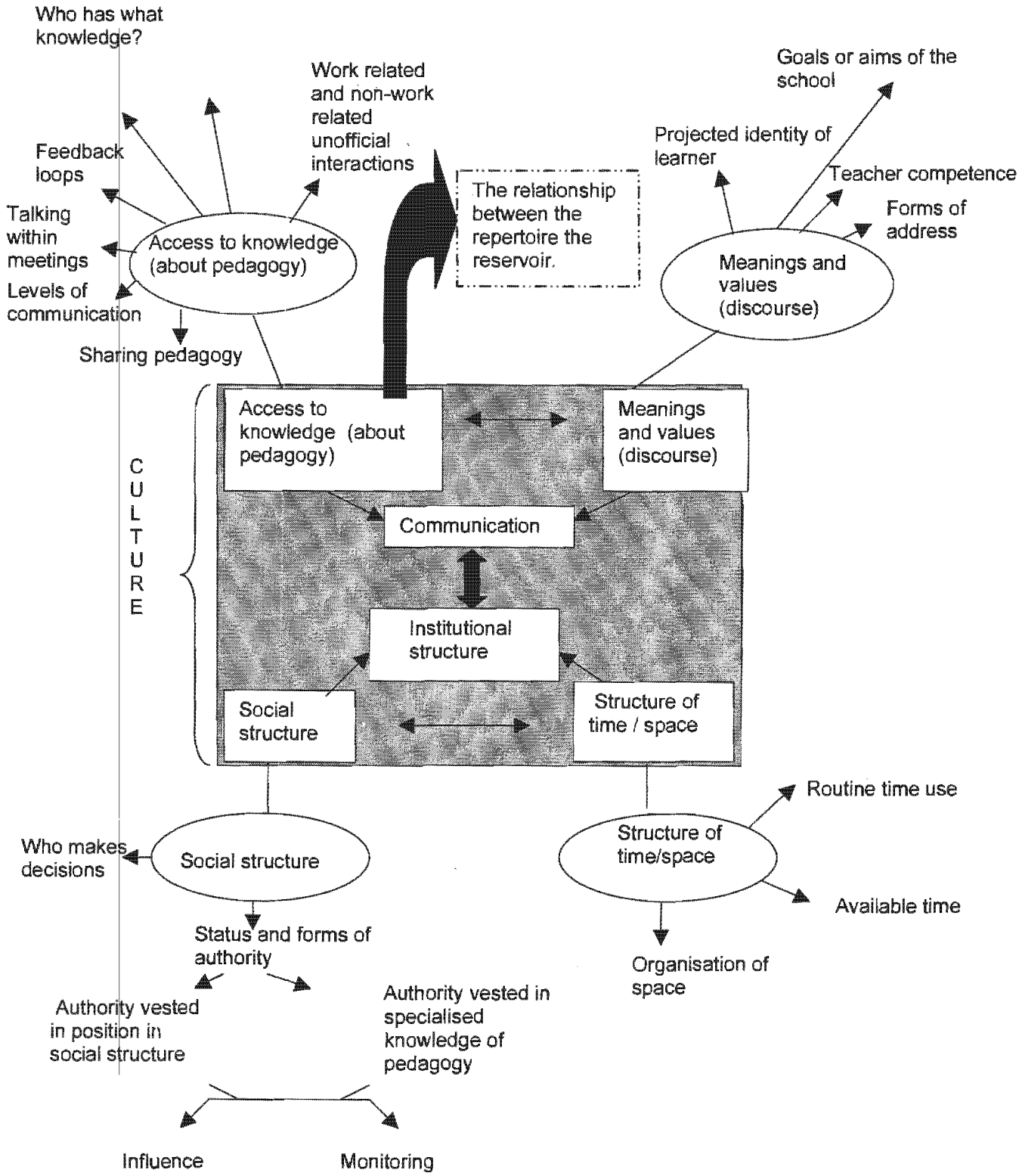
CHAPTER 4 - ANALYSIS

The question that guides this study relates to ways in which pedagogic practices are selected by a particular teacher from her own individual reservoir of practices as well as the collective reservoir of her colleagues. This places the focus on one dimension of culture i.e. access to knowledge. The study explores how access to knowledge is shaped by practices within other dimensions of culture. This does not imply that knowledge sharing is determined by, rather than determining of, other dimensions of cultural practice. Rather, the study is premised on the understanding that all dimensions of culture are mutually constitutive, as has been discussed in Chapter Two. However, it is not relevant to this study to examine the impact of knowledge sharing on other dimensions.

The data has been classified into three main categories. The first deals with institutional structure, which has been subdivided into social structure, and the structure of time and space. The second deals with communication, which has been subdivided into meanings and values and access to pedagogic knowledge. The third main category focuses on the relationship between the pedagogic repertoire and reservoir, by focussing on the teachers' freedom of choice or access to the reservoir.

The organisation of the data follows my understanding of the dimensions of school culture in order to investigate how these shape the selection of practices from individual and collective pedagogic reservoirs into individual pedagogic repertoires. Consequently, the data will be presented under headings drawn from the diagram on the following page that summarises the conceptual framework developed in Chapter Two. This

diagram is repeated from pg. 27 for the convenience of the reader who might wish to refer to it while reading this chapter.



Institutional structure

Institutional structure relates to the organisation of the social relations and organisation of time and space.

Social Structure:

The social structure of the schools distributes different forms of authority, such as seniority and status.

Who makes decisions:

> **Section overview:**
> Progress Private School have teachers who play a role in decision-making regarding all aspects of the school that directly affect their work and their development, including decisions about pedagogy. Inheritance High School according to the principal has top-heavy management and teachers who do not play a role in decision making regarding pedagogy or the running of the school.

The principal of Inheritance High School admits that the management structure is very top-heavy although new tiers have been recently introduced. The principal claims to be trying to redress the top heavy management but her new initiatives are failing to redress the culture, as the new positions are all still occupied by senior staff who continue to make the decisions. The general staff is only later informed about these decisions: an example of this can be seen below in the plans laid out by the principal. Part of what the principal envisages for the management structure is the introduction of junior grade heads, each in charge of a different Outcomes Based Education learning

area. She intends implementing this by, "*calling them and telling them what division, helping making them formulate what division actually*".

Principal: *...we are also going to next year (sic) ... that we didn't have this year. We've also got a very strong subject head system, but we are going to now build on that and have a junior subject head and a senior subject head system, and by the junior, well we are not calling it a junior subject head system but the idea of that will be that the one subject head would be in charge of the Outcomes Based Education, the eight learning areas so we will have eight new subject heads for the different learning areas and then we will have subject heads for the senior phase...*

Interviewer: *How do you see this system being implemented?*

Principal: *... staff development as well as subject development as well as individual training of individual staff members, calling them in, telling them what division, helping making them formulate what division actually, getting them to buy in...*

Decisions regarding pedagogy are similarly made at the higher levels of the hierarchy at Inheritance High School. This applies also to changes in

the pedagogy. The approach taken to implementing Outcomes Based Education has been to find a new privileged pedagogy to the exclusion of all other methods, rather than allowing staff to incorporate new methods into their existing repertoires. The way that this is done is by grade heads studying learning material and each practising one method and then coming together to decide on the "best method". During the trial, the method each grade head uses, is independent of the subject matter, the repertoires of the teachers, the content of lesson or the understandings of learners. The time for experimentation will be limited and the "best" method will be implemented in classrooms shortly after experimentation. A team of heads of department determines the "best method".

Interviewer: *What types of decisions are currently being made about teaching practice?*

Principal: *... those decisions are made very much currently as a team effort, especially on the Outcomes Based Education. ...and we come together as a group and we share our ideas. We basically have just gone into this in-depth and whereby we are going to during this holiday investigate a certain set of learning material and then come together and each practice one in the new term, and then come together and decide whether that is the route we are want to take, getting input from each*

and every individual uum call it subject head of that particular learning area…

Interviewer: *How long do you see this process taking before it will affect the practice in the classroom?*

Principal: *… next term…within the first two weeks we're going to experiment and we'll have feed back, and if it works umm everything is on standby, if it works it can be implemented directly after it has been experimented with, and otherwise we'll have to look at other ways.*

The "best method" is determined by teachers in authority at Inheritance High School and will be referred to in this study, as a privileged pedagogy. The teachers commonly refer to the privileged pedagogy, as "the Inheritance way."

At Progress Private School teachers make individual choices about the pedagogic methods used in their classrooms. The principal refers to teachers as the *" principals of their own classrooms."* Teachers play a role in decision-making regarding the general running of the school, sometimes as a full staff and other times as members of specialised portfolios. According to the principal all decisions regarding the general running of the school, educational initiatives and incidents are usually made as a team, and even once a decision is reached it is debated.

Principal: *I very seldom make these decisions alone. There is generally a team and the decisions get debated and agonised over and sometimes taken to other committees or to the whole staff to ensure we make the right decision, nothing gets decided on alone. It's a group decision nothing is done alone. Once a decision is* made we all agree or *disagree and review the decisions.*

Status and Forms of Authority:

Section overview:
At Inheritance High School positional authority and power is used to strongly pressurise members to accept the pedagogic decisions of the higher hierarchy. At Progress Private School positional authority is not explicitly evident in the interactions of members of the staff regarding pedagogy.

Authority vested in position in social structure (Positional authority):

At Progress Private School, the horizontal nature of the social structure of the school is reflected in the interactions of the teachers. The understanding of the principal is that the staff need to *"work together as a team"* in decision making and running the school. This translates into the principal not needing to rely on his extrinsic power to accomplish his objectives. The principal has to rely on staff members to fulfil the duties of their portfolios.

Staff at Inheritance High School is strongly influenced into accepting the changes that the management introduce regarding pedagogy. The staff is

not readily informed about decisions made as the principal believes in keeping teachers *"on their toes"*. The use of extrinsic power by senior staff make junior members aware of their lack of self esteem and causes segregation between the junior and senior teachers. A junior teacher complained about the power plays made by these members in departmental meetings when decisions were made by the subject head, who is also a junior.

At Inheritance High School there is a distinction between junior and senior posts that does not apply to Progress Private School. There are four senior posts, which include the two deputy principals, and two of the teachers with the most experience in the practise of the privileged pedagogy. All other positions are regarded as junior posts, including other subject heads.

Authority vested in specialised knowledge of pedagogy

> **Section overview:**
> Possessing specialised knowledge grants authority at both schools, but the meaning of specialised knowledge at the two schools differ. At Inheritance High School having specialised knowledge relates to knowledge about the privileged pedagogy and only teachers with long-standing experience in the practise of this pedagogy have authority vested in the pedagogy and are able to exert influence over the pedagogy, by becoming heads of department. At Progress Private School specialised knowledge is also equated with possessing knowledge of pedagogy, but the difference is that all teachers are thought to have this knowledge, which relates to their own pedagogic practices. This grants them authority and influence over pedagogic practice, including the authority to participate in decision-making.

At Inheritance High School specialised knowledge is accredited to teachers who have many years of experience in the use of the privileged pedagogy. This includes only some of the senior members of the hierarchy.

The teachers with substantial experience in practising the privileged pedagogy are granted posts as heads of subject departments, over those with positional seniority. This happens because even though some of the teachers have seniority, they have only been at the school for a short time and lack experience with the pedagogy and although they do play a role in decision-making regarding how the school is run; they are granted no influence over the pedagogy. The junior teachers who have only been at the school for a short time also lack experience in the practice of the privileged pedagogy. This is demonstrated by their limited access to information and by the fact that they are not called upon to share skills in staff development.

All teachers at Progress Private School are considered to have specialised knowledge of their own pedagogy, as no single privileged pedagogy exists. Authority is granted to all staff members regarding their own, individual pedagogic actions. Each teacher is expected to make decisions in the interests of their learners and their own development, and to contribute to the knowledge base of the school through staff development. Positions such as head of department are not granted on the basis of any authority gained by the number of years of practising a particular pedagogy, as no single privileged pedagogy exists. The esteem of the teachers is not based on any particular pedagogy. Consequently, teachers experiment with practices that include cross-curricular approaches.

At Inheritance High School there is a sense of knowledge and rules being static and handed from one generation of teachers to the next which demonstrates the authority vested in experience and a privileged way. This means that teachers with the most experience in the practise of the privileged

pedagogy have authority over the others in the department, who are encouraged to model their performances. This wealth of experience in the privileged pedagogy gives authority, which takes precedence over the positional authority of senior members who have less experience. An example of this is given by the principal who claims to be able to go into a classroom and demonstrate to teachers how teaching is done, she herself having been the head of the accountancy department.

A lack of specialised knowledge in 'inexperienced' teachers allows the principal of Inheritance High School to relegate the role of these teachers to something that can be demonstrated and learnt from role models, such as her.

Principal: *My role... as principal? I will at any time be able to go into a classroom and teach and show how it must be done...Demonstration, and I personally believe that the dynamics is more important than the mechanics sometimes so I am a big role player...*

The head of the mathematics department is a junior teacher who nevertheless has the most experience in terms of years at the school. She sees her role as a mentor for the others, including the senior teachers in her department.

Teacher: *...Mr X doesn't have a lot of experience but he has a very senior position at this school ...and I sometimes think that [the Head of department] (sic)... doesn't, ...they listen to... [Head of department] but you know they have their own ideas of doing things and they have been doing that...*

The senior staff member described has seniority over the head of department but not "a lot of experience" and has to "listen to" the head of department when it comes to pedagogic matters. Two of the four teachers in the mathematics department are seniors, and while they have positional authority and play a role in the running of the school, they do not automatically have influence over the pedagogy, unless they are heads of department, and the senior members in the mathematics department are not. The senior teachers "often disagree with the" Inheritance High "way" and try to use their positional authority to influence the pedagogy but don't have the authority to do so, as is related by another teacher in the department:

Teacher: *I don't know Mr X and Mr Y, what can I put it (sic), they often disagree with the [Inheritance] way but they...they act like men... yes they disagree but then on the other hand they are so like nurtured and so full of them selves, you see that I don't think they really mean it, I really don't think that*

they mean it, it's like obvious in the things that they say and whatever...

The resistance of teachers to changes in the pedagogic practices mentioned by the principal, is explained by the investment of these teachers in the privileged pedagogy and the risk of losing their authority and esteem. The head of department portrays herself as a role model and mentor. She sees it as her role to maintain the privileged pedagogy, which excludes valuing the experiences and knowledge newer (in terms of less years of experience at this school), teachers bring. Apart from the head of department and two senior teachers in the Inheritance High School mathematics department, there is also a fourth (junior) teacher. This teacher reports that she has a clear sense that her experiences in other schools do not 'count' at Inheritance High School.

Teacher: *I have been teaching standard six and seven maths now for two years and this is my first year I'm teacher senior maths.*

Interviewer: *Have you been here for two years?*

Teacher: *I taught primary school for three years, and then...that was in Mosselbay and then I came to Paarl and I had a senior science, I was teaching science for senior classes in Paarl that was for a year then I went to [school] and I taught science there and then I came to [Inheritance High*

School] this is the first time I was teaching maths, I've been teaching maths for primary schools (laughing), but that doesn't count.

Teachers who do not have experience in the Inheritance High School way are not invited to share their skills through staff development sessions. In one case, these teachers were not invited to share their knowledge of computer skills even though they claimed prior knowledge of the computer packages that outside facilitators were brought in to teach.

Interviewer: *What other staff opportunities are offered?*

Teacher: *But when we have computers they get someone in the second and the third term to teach us computer skills umm... but mostly we all, I think the maths department knows Exel and we know Microsoft word so that in itself was a waste of time for many...*

Progress Private School encourages teachers to play a role in their own development by providing ideas for staff development, for which external facilitators can be used, and becoming involved in facilitating sessions to share their individual skills or knowledge areas. They play an active role in different aspects of the school by having different portfolios, and their opinions are taken into account on administrative tasks, which involve how learners are to be dealt with, or issues that arise at school. They also contribute to team

decisions regarding the educational programs of the learners they teach. An example of this would be decisions involving learners who may be exempt from mathematics or included into specialised programs.

Head of department: *...some learners who are special needs this is when scientific tests provides evidence that they are not able to cope with maths and this gets discussed in the maths meetings and the teacher of that child will play a role in deciding where or not the child should be allowed to give up maths...*

In general, teachers at Progress Private School are expected to develop a pedagogy that is best suited to the classroom dynamic and the subject matter.

Monitoring:

Section overview:
At Inheritance High School teachers are monitored to ensure that junior teachers fulfil all the expectations of them. Monitoring in this school occurs in many forms, such as monitoring of noise levels, book inspections and results. If teachers do not conform to what is expected, there is intervention into classes or teachers are summoned to the office. This same explicit monitoring is not evident at Progress Private School.

At Progress Private School there is a lack of explicit monitoring although it can be argued that there is an influence on teachers from departmental meetings, where teachers disclose their progress with each class and discuss the difficulties they are experiencing.

Interviewer: *Are you aware of how the other teachers in your department are teaching the same subject matter?*

Teacher: *Uuuh.. not really, No, not really, we don't really, sometimes we do, but with this specific topic with the grade sevens no I haven't really worked out how the other teachers in the department teach this.*

Inheritance High School explicitly monitors the actions of teachers and a teacher claimed that the expectations of her were limiting. She claimed to be discouraged from using group work as this resulted in raised noise levels in her classroom and this would create the possibility of a senior teacher intervening because of the mistaken belief that she had lost control of her class.

Teacher: *...the way that discipline should be kept at this school and in group work the kids are going to talk and the are going to make a noise so its actually not really encouraged, so I'd rather not do group*

work (laughs) because then everything and everyone can hear, can hear how I am losing...

Interviewer: *There's a lot of that around hey?*

Teacher: *... yes they listen also to what you do and are you working and they will come into your classroom and you know (laughing) (whispered) start shouting and... and you know, and you know, I think I was actually put here for a reason.*

The teacher claims to be constantly aware of being monitored and demonstrates this by whispering some of the information in the interview and jokingly explaining that somebody might be listening in. Her remarks about her comments being confidential as well as her inkling that senior staff members in her department discuss things about her are further examples of this.

Interviewer: *Do you think they talk about things amongst themselves?*

Teacher: *I think they do, I don't know whether talk about me as well (laughing)... this is confidential isn't it?*

Some of her awareness is also evident from her suspicion about "*I think I was actually put here for a reason*" meaning that she had been assigned a classroom between the head of the mathematics department and the head of the accountancy department, who is a senior, for the purpose of monitoring her actions. More discrete ways in which monitoring occurs are

through book inspections and through comments on the results that learners obtain.

The teacher explains that the purpose of book inspections is to ensure that the books have been covered correctly and that the teachers have fulfilled expectations, by marking the books the required number of times, marking all tests and ensuring corrections are done.

Teacher: *...the book inspections happen in the first term. ...umm... must look at the books to see that everything is covered in plastic and brown paper and everything is labelled in the correct way, and then every term she has to make sure that I at least sign the books twice a term, I think and then just after the June or just before June she just makes sure that all the tests are marked and, ja she does that, and the corrections...*

The principal is responsible for monitoring the results and teacher's who are not seen to be producing "results" are summoned to the office to analyse the results and receive guidance from the principal.

Principal: *I also use a lot of training through the examinations. Once I evaluate the results I would individually call a teacher in and ask the teacher after consultation with the subject heads if I feel*

that the teacher wants the guidance from the principals office, try and link the teacher to uum to ... to examine the results and maybe the reasons for not being successful.

Influence:

Section overview:
At Inheritance High School the head of department sees it as part of her responsibility to use her authority to influence the pedagogy and the interaction between teachers. She aims to set an example for the other teachers and provides guidance to them in the form of structuring lessons and making her experience available to them.

The horizontal structure at Progress Private School allows the head of department to see her role differently. She views her role to be mainly administrative and resists influencing the pedagogy of teachers through her position. The teachers play a role in the functioning of the department and use their own discretion to choose whom to seek guidance from as all teachers have authority vested in pedagogy.

The head of department at Inheritance High School structures the pacing of the work explicitly, only allowing teachers to draw from their repertoires ways of explaining the content:

Head of department: I look at the chapters...see how much in each chapter and how long it takes to present... divide it into that number of lessons and then we must fit it into that time slot...chapter two do it over...two lessons and...next section of the chapter three lessons...the homework you only give so... you can mark it the next day.

The head of department compiles notes, which include selections from textbooks gathered over a number of years. These notes are supplied to the learners and are used as the basis for lessons. Generally the head of department compiles notes on her own as material for lessons, and mostly these are the same from one year to the next, sometimes with the addition of a new idea from a textbook.

Head of department: *Sometimes I use it to put into my new notes, you know so it's basically from all over, it's just that one doesn't formally sit down and discuss a chapter and see what your ideas are... (whispered) it goes quicker this way to be quite honest (laughing) ...but they know they are more than welcome to give ideas.*

The time structure was established by the previous head of department and is only adjusted slightly to fit in with the term times each year.

Head of department: *Most of it I also got when I came here. It's changed slightly with the number of weeks per year but I still try to keep the lets say ten lessons for this chapter. I still try to stick to ten lessons some of it was too many and some of it was too little so it's changed slightly but that was a very good basis for me to build on.*

Included in these notes is a worksheet which the head of department claims *"has been put into outcomes based"*. Teachers are told which exercises to cover and depend on their own knowledge for the explanations. A junior teacher explained that she depends on textbooks or the head of department (*"as a colleague"*) for guidance if she experiences difficulty with explaining a concept.

Teacher: *She helps me to plan; very, very important ... she, umm...if there's something that I don't know how to get across to the learners, she has a lot of experience and she, her methods, sometimes methods that's not in my textbook and so on she gives me easier ways to explain things.*

The head of department sees it as her role as a mentor to help. In addition, the relationship between this head of department and this junior teacher is aided by the fact that these two teachers have formed a personal friendship, which makes it easier for them to interact.

Teacher: *You know I actually ask her as my colleague really, there isn't, I never feel scared of asking her, I don't feel she's going to think I'm stupid, really no I ask her as a colleague, the two of us get along very, very well.*

The principal claims that the heads of the subject departments at Inheritance High School *"carry the weight of the subject"* by providing guidance to the other members of their departments regarding the privileged pedagogy. This relates to what the head of department believes her role as head to encompass. Her understanding is that she must be an example to other teachers and provide guidance for them.

Head of department *...to set an example for the other teachers mainly of hard work and dedication and putting the kids first, the learners ... their interests, and always be concerned if the marks are down you know, and to have a good relationship with the learners, not close and not personal but to communicate effectively with them, ag, in all aspects of the teaching to set a good example to work hard and to have the work up to date at all times and not to umm umm I don't know how to say this but really to ...and to motivate the teachers.*

The head of the mathematics department at Progress Private School describes her role as head to be more of an administrative role that does not include monitoring the work of other teachers, or necessarily being the first teacher others approach for guidance.

Interviewer: *What do you see your role to be as head of the maths department?*

Head of department: *I believe a large part of my responsibility is to be organised and to provide structure and organisation for the other teachers in the department. I provide them with the structure such as test dates and have copies of worksheets or booklets made. I am there to deal with any issues that arise with parents or learners who are discipline problems. I like to think teachers and learners can come to me with any problems.*

Interviewer: *Are you aware of how all the teachers teach each topic?*

Head of department: *...No, not really except when teachers talk about their difficulties or when we are all using the same booklet.*

There are some worksheets and booklets that are made available to the teachers, but it is their choice how and when to use them. Teachers jointly decide on how to pace the work and draw on their own reservoirs to establish how to best teach the content.

At Progress Private School the positional power of the head of department is not the determining factor in choosing whom to seek aid from. Teachers are free to seek aid from any teacher who they perceive to have

strength in the particular area they need help with. Teachers are not pressured into using any of the ideas or suggestions which are made to them as they are not monitored in this way, but have the option of incorporating suggestions into their own approach.

Interviewer: *...and do you know how your head of department is teaching this?*

Teacher: *Do you mean specifically does she give you a method?*

(Interviewer nods)

Teacher: *If you ask for it she will, but sometimes as I explained to you, sometimes her methods don't suit you. Because you see it and explain it differently and even if you try to do it her way it doesn't always work. Like I tried to use her set out of the factors in factorisation this year but I kept on forgetting and getting the kids confused by switching between methods.*

Another teacher tells of how she makes choices about who to ask for assistance:

Teacher: *When it's a discipline problem I won't like ask... because... I don't really know why I won't ask her, but like ... I think she's very good at discipline, I*

value what she has to say about discipline because I think she is quite experienced,... got some very nice ideas but umm, and because she's quite bright, so she comes up with these innovative ways of doing things. So, yah I've used quite a few of her ideas and she's got lovely worksheets as well that she sits hours working on and then she uses them in the class and she doesn't like force you to use them or anything but like they are very nice worksheets and I use that quite a bit as well.

The same teacher explains how seeking aid and assistance influences her pedagogic practices:

Teacher: *I know that if I think, I think something's not working for me I always go to one of them and say to them, how are you teaching this section of work because it's not working for me, you know then, I just listen to what they say what works for them and maybe that will like work for me if I change from like the next day onwards or whatever.*

Structure of time and space:

Social authority influences the way time and space are used.

Routine time use:

Section overview:
The two schools do provide the structures which allows members the opportunity to discuss pedagogy, but in different ways. Progress Private School has predictable weekly meetings for this purpose for both the staff as a whole and for the mathematics department. Inheritance High School meetings are less predictable with teachers getting notice in morning meetings, regarding full staff meetings later the same day. There is no prior notice of departmental meetings as they occur at the discretion of the principal.

The time structure at Progress Private School allows for the time tabling of departmental meetings as routine during each week. This arrangement takes into account that some teachers teach in more than one department. The mathematics departmental meetings take place predictably every Thursday during second break and into the sixth period. There is a set agenda, which gives structure to the meetings and allows teachers to prepare themselves for discussions that encompass a wide range of relevant topics. A teacher explains how the predictability of these meetings encourages sharing:

Teacher: *There is some sharing of things and ideas in meetings; we do share because it's been set up by the department.*

Teachers discuss the nature and purpose of departmental meetings:

Teacher: *Well we have formal meetings on a Thursday during the second break and most often into the sixth period. In these meetings we will sit and discuss different learner issues sort of informally and also because its right after the fifth lesson in which we have all been teaching.*

Another teacher discusses how the relationships between the teachers influences their discussions:

Teacher: *Well they are very formal in that all of those types of things have to be discussed but in the meeting itself, we are not very rigid. Like if a new topic comes up we'll talk about it, and we talk about social things as well, because it's not only a time when we only talk about maths but also just interact as maths teachers, as friends.*

There are structured general meetings Thursdays at first break which provide an open forum for discussion of any grievances, problems or planning. The staff provides the agenda during the course of the week by adding a topic to a specially assigned notice board. Case conferences occur on Mondays during first break for all the teachers of the special needs learners for whom the conference is planned. Notice of the name of the

learner is provided on the notice board in advance and it is mentioned in the morning meeting.

Inheritance High School has informal mathematics department meetings which are irregularly spaced and do not have a set agenda as the meeting times and dates are at the discretion of the principal and there is no prior notice of the meeting for teachers to prepare themselves. Staff claim that these meetings occur fairly regularly but all subject meetings run concurrently regardless of the fact that there are teachers in more than one department.

The head of department doesn't produce an agenda, as she has no prior warning of the meetings. She uses the time to deliver administrative information and delegate work. The teachers are often called upon to create worksheets for their own particular level or grade, or to reuse tests and worksheets from as far as ten years back. There is no formal agenda, and the head of department claimed that pedagogy only really gets discussed if it comes up as part of another discussion.

Interviewer: *Do you ever find you talk about the way things are taught in that time?*

Head of department: *...uuummm sometimes, but it's not, that is something that just happens, it just comes, it's not something that I planned.*

There are formal full staff meetings at Inheritance High School that the staff is notified about in morning meetings but these have set purposes, such

as a meeting to discuss the setting out of reports, and do not have the flexibility for teachers to discuss their own concerns regarding pedagogy.

Available time:

> **Section overview:**
> Both the teachers at Inheritance High School and Progress Private School claim that time always seems to be in short supply, but the responses of the teachers to time as limiting factor for pedagogy is different.

The head of department at Inheritance High School who explicitly structures the work of the other teachers in the department and decides on the pacing, claimed that time was her main hindrance. She claimed that if she had more time available to her, she would *"think of ways of making the lessons more interesting and adapting the lessons more to the needs of the learners"*. She would like to spend more time on each topic to be able to explain in greater detail.

Interviewer:	*What do you find limits the way you teach?*
Teacher:	*Time...time ...time...time is my one constraint as far as anything is concerned. If anything restrains me it's time ja, I really battle with time, there's just no time to do everything that one wants to, you know.*
Interviewer:	*If you had some extra time what would you like to do?*
Teacher:	*Umm...oooh, I haven't had time to think about it (laughing) ...I don't know, I suppose, I'd think of*

more ways to make the lessons more interesting and more fun and to do maybe other things, to maybe adapt you know, or ..to adapt maybe more to their needs than to...and not only my own personal time, you know the lessons are short and you've really got to rush to get through the work, and apart from that you don't always have the time to stand still on a topic and to really explain things in as much detail as you want to I mean you just don't, but I don't think that even if the lessons were longer one would have the time. One always doesn't have there's just so much work to cover. The syllabus is very full; the syllabus is too full.

The head of department explains the structure of a general lesson:

Head of department: ...since I find we only have 35 minute lessons and if I should let them explore everything then we won't finish our syllabus and we still have structured tests which we have to write and our lessons are short. We don't have long hour lessons. So I usually um, I introduce something and I give them an example and let them practice and then give them homework. That's usually how

> I do it, and the next day we mark the homework, make sure that everybody understands and introduce something new and go on.

Time limits the choice of pedagogy for these teachers as explorative work is thought to be too time consuming. A teacher at Progress Private School agrees with this notion of time being limiting, but takes a different approach as she believes that the department jointly deciding on the pacing of the work limits time. A teacher's approach is not to omit the use of exploratory work, as she complains that there isn't "*that much time to experiment.*"

> Teacher: *I mean time is a big issue here because of the way we work as a department, that you don't have that much time, I don't think we have that much time to experiment.*

Communication:

This section relates to the meanings and values of staff members and access to pedagogic knowledge.

Meanings and Values:

Meanings and values as are expressed through discourse and forms of address are discussed in this section. Specifically, the goals and aims of the school, teacher competence, the projected identities of learners and forms of address are discussed.

Goals or aims of the school:

Section overview:
The purposes and goals of the two schools as perceived by the principals are different.

The principal at Progress Private School describes the school as fully inclusive, which suggests that there are no selection criteria for the admission of learners or criteria for the selection of the school by parents. It could be argued that it is in the nature of the school that it selects and is selected on the basis of criteria other than those mentioned by the principal. The principal does however emphasise that the selection is not based on the academic ability of the learner.

Interviewer: *What is the ethos of the school?*

Principal: *Firstly, I think it's a community school and a [religious]... school, and an inclusive school,*

which means that no child is turned away for any reason, being financial or academic or any other reason. We strive to let each child grow to their own potential regardless of if that is top academic education for those that need it and give the others something worth while.

Interviewer: *Is this what you see the purpose of education to be?*

Principal: *So long as each child grows to their own potential, it doesn't matter if the child attains an F or whatever as long as they reach their potential. That's my view.*

The principal's discourse regarding his vision for the school and the role of the teachers in accomplishing this vision, revolves around the idea of the school as *"a happy place"* where *"teachers love and understand the needs of learners"* and are willing to *"change with the kids"*, while maintaining *"boundaries and limits"*.

Principal: *I am satisfied that my vision is being realised every day. The inclusive program, that's my one vision, and making this a happy place where everybody is happy to be here, the kids want to be here and the teachers not to feel like that they don't feel like going to work, they must be happy*

to be here. And if we can do that, by providing the kids that need it with a place to reach their potential.

The principal of Inheritance High School places emphasis on the *"tradition*[al], *English"* ethos of the school and the importance of making learners viable in the job market. She uses this as an explanation for her emphasis on computer literacy for all learners.

Interviewer: *How would you describe the school and what is the school's ethos?*

Principal: *An old tradition English ethos basically based on the traditional English schools and we wear gowns and we have formal assemblies and our ceremonies are very much like hmmm-traditional English schools.*

Interviewer: *What is your view on the purpose of education?*

Principal: *The purpose of education is to prepare learners, especially in this day and age for the economy of the twenty first century.*

Interviewer: *And how do feel you are accomplishing this goal?*

Principal: *By emphasizing hmmm hmm the ability, to be able to go into the job market and that is why we've brought in the first computer room as well as the second one that we are busy building now*

and to ensure that those who are not able to go into universities or technikon have also got something to fall back on and that is why we've also, why we've introduced the N3 course in computer technology for all our learners.

Interviewer: *What is your vision for the school? Where do you see the school heading?*

Principal: *My vision for the school is to enable all the learners that go through here, to be able to compete internationally where ever they want to, in whatever field they want to go into be it academically or be it technically, that is once again why the computers play such an important role in our academics and why we have basically arranged the school around that to ensure that every learner is computer literate and not a specific group in the school.*

Part of the expectation levied on teachers is the use of a pedagogy suitable to the traditional ethic of the school while emphasising skills which are useful in the work place. Teachers are currently being trained to become computer literate, as they will be required to include the use of computers in their pedagogy.

Teacher Competence:

> **Section overview:**
> At Progress Private School where the inclusion of diversity is emphasised, a wide definition of competence exists. This understanding is based on the notion that diversity in pedagogic practices provides opportunities for reaching a wide range of learners with different academic capabilities. According to the teachers, including the principal teacher of Inheritance High School the key expectations of teachers is that they maintain the high standard of discipline and produce *"results"*.

The principal of Progress Private School draws on a distinctive discourse in explaining how "the type of teacher that we employ" brings his vision into realisation. He refers to them as *"the special type of person"* who forms part of this team and enjoys working in *"a happy place, where all are happy to be"*. He suggests that the school's accomplishments are very much the result of this team effort.

Interviewer: *And how are you enabling that vision? Are there any types of structures you are putting in place to enable that vision?*

Principal: *Enabling that vision are the type of teacher that we employ: The special type of person who is able to understand the needs of middle school children and they must firstly have a very good grasp of the content and a passion or love of kids and understand the needs of kids. They must set boundaries and limits and provide the freedom to push those boundaries to the limits and have a*

sense of humour. And the ability to be able to change with the kids, because you know the kids change every year. Also the fact that we've become an inclusive school is also a huge factor in that vision.

An implication of the inclusion policy is that the school must be able to facilitate relevant pedagogy for the varied needs of a wide spectrum of learners. This means that teachers need to be adaptable to these changing and varied needs and have a wide and flexible repertoire to be able to cope with these changes while maintaining a firm structure in the form of "*boundaries and limits*" which provides the space for this. There is a broad definition of competence at this school, which encompasses the varied strengths of the teachers and an understanding that pedagogy should reflect the varied needs of learners through constantly evolving by process of experimentation.

Principal: *Well there are different teachers with different strengths and weaknesses as well. Well the ideal middle school teacher is a teacher who can understand the needs of the children they are teaching. Umm is able to set boundaries and limits and are able to change and not get stuck fast on an idea and are not prepared to change*

because you know, kids change and they must change.

The principal teacher[3] of Inheritance High School claims that it is the purpose of the school to produce learners who are viable in the job market. A narrow definition of competence exists at this school, based on a privileged pedagogy which accomplishes this goal. The principal of Inheritance High School explains:

Principal: *A competent teacher to me, is a person who produces results…*

Interviewer: *What do you mean by results?*

Principal: *Results on all levels, well balanced, learner who produces, first and foremost in high school, its specialised subjects. So, if you are a maths teacher, then the first thing you must produce is maths results. … And if you produce maths results, I believe that you automatically get to the core, which is a well-balanced person who achieves, finds happiness within himself and from that all other things stem.*

[3] The principal of a school is a complex embodiment of many roles; the principal as teacher or pseudo employer or colleague or friend. The principal teacher reminds one the principal is also a teacher and subject to the ideals of competence levied on teachers in the context of the school.

From the quote it becomes clear that results are the emphasis, and a well-rounded learner a by-product of successfully achieving results. With this focus teachers are strongly pressured to adopt an approach that is tried and tested to accomplish this. These pressures take the form of possible intervention into classes and being summoned to the office to examine why the expected results were not achieved, or discipline is not achieved to level that is expected.

The Inheritance High School "*way of doing things*" or "*the way things are done at this school*", pervades the discourse of the teachers and is reflected in the repeated use of the word *"supposed" as* in the quote which follows, where a teacher explains what is expected of her in terms of discipline in the classroom.

Teacher: *... Yes, we're supposed to, but you know when we have this discipline problem, or how shall I put it, the way that discipline is supposed to be kept at this school...*

In order to gain esteem in the eyes of his or her colleagues, teachers at Inheritance High School need to conform to the privileged pedagogy at the school.

Forms of address:

Formal forms of address at Inheritance High School are an indication of the nature of the relationships between members of staff and serve to remind

members of their position in the school and the businesslike nature of their work, which is to *"produce results"* (Principal). They also maintain the boundaries between the levels in the hierarchy by creating distance and formality in the relationships. This is even evident within the same department, with the exception of teachers who share personal friendships outside the institution.

Teacher: *I don't know Mr X and Mr Y, what can I put it...*

The teachers at Progress Private School are informal and familiar with each other. They regard themselves as friends as well as colleagues and address each other on a first name basis regardless of their job title.

Teacher: *...but [we] also just interact as maths teachers, as friends.*

Projected Identity of the Learner:

Section overview:
It is clear from interviews with principals and teachers at Progress Private School and Inheritance High School that learner identities are constructed very differently at the two schools.

The learners at Progress Private School are viewed by the principal as being individuals with varied and changing needs. He claims that the school aims *"to provide a place where all learners can reach their potential whatever that may be"* and emphasises that in terms of academic capability the range is very diverse. The discourse regarding the teachers includes their need *"to*

understand the needs of learners" and being able to *" change and not get stuck fast on an idea and (sic) are not prepared to change because you know, kids change and they must change."*

At Inheritance High School the principal speaks about learners needing to be able to compete in the job market:

Principal: *...academically or be it technically, that is once again why the computers play such an important role in our academics and why we have basically arranged the school around that to ensure that every learner is computer literate and not a specific group in the school.*

The emphasis here is not on the diverse needs of learners, but rather homogenises them and suggests that they all have the same need, which is to be computer literate. A teacher claims that she rarely uses exploratory work because it is more suited to brighter classes. The implication is that there is little diversity in the student body in terms of academic ability or needs. It can be argued that the school provides an education that is pitched at the level of an average learner and does not accommodate the needs of other learners by offering variety in the pedagogy.

Access to Pedagogic Knowledge:

This section relates to who has what knowledge and the extent to which teachers make their pedagogic knowledge available to each other.

Levels of Communication:

> **Section overview:**
> At Inheritance High School teachers at different levels within the hierarchy have different understandings of pedagogy. At Progress Private School the horizontal social structuring of the school results in more sharing of pedagogic insights.

At Inheritance High School members at different levels of the hierarchy were asked what Outcomes Based Education entails. At the level of the principal Outcomes Based Education was seen to involve implementing structural changes to the subject head system. Junior subject heads were going to be introduced, each in charge of one *of "the eight learning areas"*, which would result in these being taught separately form the rest of the subject. There would be only conventional subject heads for the senior phase. For the head of department, who is also a maths teacher, Outcomes Based Education simply meant using more practical examples while at the level of the other junior teacher the meaning included allowing learners to make their own meaning through exploratory exercises, as well as making the work more practical.

These different understandings are indicative of a relative absence of discussions about pedagogy across different levels of the hierarchy at Inheritance High School. There is a strong separation between senior and junior staff and even within the mathematics department, which is comprised of two junior members and two senior members, a junior teacher complained

of the inability to communicate across the status barrier. She explained that she did not feel free to ask members of the senior staff "*anything*" regardless of the fact that they were in the same department.

Teacher: *...since they are on the senior staff they like very different...I won't actually, Mr X doesn't have a lot of experience but he has a very senior position at this school and to be honest I don't feel free actually to ask them anything ...I don't know why I feel badly here but ummm...*

This lack of accessibility and familiarity between staff members at Inheritance High School is re-enforced by the senior staff having extrinsic power over junior members. This separation of the senior and junior staff leads to the understanding by a junior teacher of the senior staff being "*nurtured and so full of themselves*". Junior teachers express some resentment about *"the schools treatment of them"*, i.e. of senior members.

Feedback Loops:

Section overview:
At Inheritance High School limited information passes from the top of the hierarchy to the teachers at the other end and these teachers in turn, do not provide feedback. At Progress Private School the teachers understand that they are part of a team within the school and as such must share information to be effective.

The teachers at Progress Private School are part of a well-established feedback loop that allows information regarding learners or incidents in the

classroom to be passed back and forth between the principal and the head of department, the grade heads, and the parents. This feedback loop does not exclude the members of other departments as teachers discuss learners when they interact socially and also in the morning meetings.

Interviewer: *Do you often discuss work with people from other departments?*

Teacher: *Socially ... yes we will discuss the kids we all teach or general stuff.*

Who has what knowledge? :

Section overview:

Progress Private School entrusts teachers with private and personal knowledge about learners with the emphasis being on them being "professionals", while Inheritance High School withholds knowledge from teachers until such time as those in authority deem it suitable for them to know.

The teachers at Progress Private School understand that they are part of a wider network of schools, consisting of not only the primary, feeder schools who pass on relevant information about the learners in the system to allow teachers to ensure consistency in the pedagogy, but also the High Schools to which the learners will go. A Progress Private School system co-ordinator organises meetings with the relevant teachers from each of the schools to discuss pedagogy.

Teacher: *...I actually brought this up at the primary school teachers before and they actually said they do a*

lot of this at the primary school, so I don't think we really have the time to do a lot of concrete stuff, when in fact they should have weighed and measured and poured a long time ago which they shouldn't need to do now in the middle school now any more...

Interviewer: *You mentioned that you had discussed the work with the primary school teachers. How did that happen?*

Teacher: *... We have meetings which are set up by a co-ordinator for each subject to discuss particular problems we see arising in the way we teach, so that we all teach the same thing, as well as anything we should know about the kids that are being passed on.*

The general staff at Inheritance High School have bought into the culture and become accepting of its practices, including being limited in access to information. An example of their insouciant acceptance of this limited access to information is given below. The school is implementing change in pedagogic practice but teachers will only find out at the last moment. The teacher demonstrates a sort of resignation towards her lack of knowledge and ownership of the school.

Interviewer: [The principal] *spoke a bit about the other computer room being built so that next year the teachers will teach some lessons in the computer room. Has the department planned anything?*

Teacher: *... Noooo, we don't know anything about that yet, (laughs) but we never do.*

The principal sees her role in withholding access to information as a way of accomplishing smooth acceptance of these changes. She strongly influences the culture by keeping teachers *"on their toes"*.

Principal: *Well you know, when I tried to make changes I encountered such resistance. So like with the timetable changes, I had to first go in there and tell them that I was going to make the change then leave them a while and then go back and make the actual change. They are more accepting that way. I have to do the unexpected to keep them on their toes, they mustn't always know what is happening next.*

Similarly, the principal uses her discretion to determine when the staff needs unofficial, non work-related activity and also to decide the nature of these occasions. The staff is not always granted access to information

regarding the activities in which they will be involved, and are pressured to attend.

Principal: *I have basically been empowered by the governing body, if I feel that it's time for the staff to, to team build or to bond then I have got the power, the financial aid to do that. If I felt that they needed a drink now then, then I would call them together and say guys it's time out we need to just take a break.*

An example of the way in which the principal manages, information relates to the introduction of Outcomes Based Education.

The principals in the area where Inheritance High School is situated came together to form a study group on Outcomes Based Education and from this it was decided to hold a conference to aid the implementation of Outcomes Based Education. One delegate from each subject at each school attended a meeting. It was decided that implementing Outcomes Based Education in mathematics would require each school to convert one chapter of the textbook to an outcomes based format. This was largely understood and put into practice as providing a worksheet with practical examples that could be used in the classroom. Only the (then) head of department was allowed to attend the conference, and she has since left the school. The new head of department does not know how the initiative was started or exactly

what was discussed regarding pedagogy, but the worksheets are in use at the school.

Similarly, the Western Cape Education Department provided workshops regarding the implementation of Outcomes Based Education that the previous head of department attended but the information had not been shared with the other teachers.

Interviewer: *Whose initiative was it?*

Head of department: *... I have no idea (whispering and laughing) ...I suppose it was the department of education ... I suppose yes. Yes there were formal training sessions last year as well, you know days of training by the education department but then again only she went, yes hmm.*

It is possible that teachers guard their authority at the school by protecting privileged information they have access to and that teachers in this culture have become accepting regarding decisions that affect their work and do not question them. This view is supported by the current head of department's lack of knowledge regarding her role in appointing new teachers.

Interviewer: *Do you play a role in the appointment of new teachers to your department?*

Head of department: *There hasn't been an opportunity like that yet.*

Interviewer: *Do you know who would be involved in appointing a new teacher?*

Head of department: *No, no I don't...*

Another teacher in the department only knows that doing the worksheets is part of the Outcomes Based Education initiative and that the best work must be kept as part of a portfolio for each learner but has no idea of the purpose of the portfolio or who would look at the portfolio.

Talking within meetings:

> **Section overview:**
> At Inheritance High School and Progress Private School the discursive structure of morning staff meetings reflects the social structure of the school. At Progress Private School the meeting structure is fairly open. Firstly, the grade heads provide any relevant information from parents regarding learners or incidents which occurred the previous day and the counsellors contribute by offering advice. Then, there are general announcements by staff, and if the principal has any information he feels he needs to pass on to staff he then ends off the meeting. At Inheritance High School the hierarchical nature of the social structure is evident in that the principal first addresses the staff, followed by the two deputies and then staff announcements. The staff takes turns to deliver a message for the day, which is reiterated by the principal.

Progress Private School has a horizontal management structure that allows staff members to negotiate shared meaning in meetings. The horizontality is re-enforced by the way teachers jointly decide on the pacing of new work, and discuss new pedagogic initiatives. Problems experienced in the classroom, any upcoming opportunities for staff development, problems with differentiation of learning programmes, information passed on from parents, personal events and departmental social outings also get discussed.

It is during these meetings when resource material is shared, discussed and continuously reviewed.

Teacher: *...we come into the meeting talking about our previous lesson and about kids we all know about or who taught them in the previous year. We have a pretty set agenda but we take a long time discussing these issues and also any parent contact we have made. We also discuss all the other general stuff like dates for projects and our maths dinner stuff and any other stuff of interest like the conferences or Olympiads. The next section is specials needs education where we discuss learners with special needs and the problems that arise with teaching them. After that we talk about test dates and putting marks in on the computer to get averages. Then we talk about how far we are with each class and any concerns about time or whatever.*

The head of department confirms this:

Head of department: *...they happen during break so everybody comes from a class talking about the happenings of the previous lesson and we discuss things informally*

about our maths socials and other issues or funny stories which arise during the week. Like calls from parents or anything the teachers feel I should know about specific children or situations. We also discuss any information I need to pass on or anything I have been informed of by parents or the principal, or about upcoming conferences.

At Inheritance High School, the head department explained that she uses the time in mathematics departmental meetings to delegate work and for administrative procedures not discussions about pedagogy.

Interviewer: *Do you ever find you talk about the way things are taught in that time?*

Head of department: *...uuummm sometimes, but it's not, that is something that just happens, it just comes, it's not something that I planned.*

Sharing pedagogy:

Section overview:
At Progress Private School teachers tend to work collaboratively while at Inheritance High School teachers tend to work on their own.

At Inheritance High School, some teachers withdraw into their classrooms as a response to being monitored by their seniors and the explicit prescribed structuring of their work. Work is often done in isolation and then

shared as a resource in the form of worksheets, and reused and passed down over a period of many years. The position of the teacher in the department determines their awareness of the pedagogy of other teachers. The head of department indicated that communication about pedagogy does take place between the teachers of the mathematics department.

Head of department: *...we always know what is going on in each other's classes it's not as if it is a secret to everybody else or only the subject head knows...*

The junior teacher, when interviewed, expressed a wish to have knowledge of the methods the head of department uses and how she attains consistently good results.

Interviewer: *Are you aware of how the other teachers in the department teach these lessons?*

Teacher: *No, no I would actually like, to know how [head of department] gets such...she gets...everyone passes by her, and she gets such good results and her kids are so disciplined they do their work and I often wander what does she do to get them ... (laughing) you know she's actually very amazing and but I think she's very strict and the kids are scared of her I think, and I would have to be strict to get the results she gets.*

Book inspections can provide access to the ideas of the junior teachers who do not feel they have enough "experience" to offer their ideas. The head of department recalls asking the junior teacher about an interesting way she used to teach a lesson about the sum of the angles of a triangle. Generally, however this type of sharing is not the norm, as both teachers could only recall this one case.

Interviewer: *Do you find that she draws on you a lot as well?*

Teacher: *... umm since I'm quite new at this, umm ... she doesn't, but I sometimes when I have a good idea about something like for instance when we did triangles, I made the grade eights cut off two, the top angles, opposite two angles and fit it in on the other side and she was quite keen on that because then they can see that the opposite angles add up to the exterior angle and but since I'm new at this I normally ask her for advice.*

Guidance takes the form of mentoring of junior teachers by the head of department. This means that the junior teacher receives advice from the head of department but this does not translate into mutual sharing, as the junior teacher does not reciprocate by sharing her experiences due to her perceived lack of experience, and lowered self-esteem in this particular workplace structure.

At Progress Private School teachers have considerable autonomy and practice collaboration. They are said to have total autonomy in their classrooms to use their own personal strengths and styles and the teachers claim that collaborative work occurs both through informal interaction as well as through the departmental meetings. When asked about his impact on pedagogy in the classroom the principal replied:

Principal: *Now I would hate everybody to have to work according to my style. I have my own particular style and that works for me. I believe that when each teacher walks into a class, they become the principal of that class and they must do what works for that person, I'm certainly not going to intervene...it's up to that teacher to use their own personal style and their own strengths.*

Work related and non-work related official interactions:

Section overview:

The freedom of staff at Progress Private School to move around the staff room allows them to interact with members of the staff from different departments. At Inheritance High School teachers don't enjoy the same freedom and claim that the atmosphere during the school day limit their interactions. The structure of time and space provided by the schools shape the interactions between members of the staff very differently in the two schools.

The teachers at Inheritance High School "*don't socialise amongst each other at the tables during breaks*" (Teacher). The staff regard each other as

friendly but feel that the atmosphere limits their interactions both regarding pedagogy and personal non-work related matters. This atmosphere is expressed and sustained by each member occupying a specific seat at a specific table and members regarding certain seats as their own which limits the ability of teachers to move around and interact with each other during break. Discussions are mostly of a personal nature but at times pedagogy is discussed. Although, the staff regards each other as friendly, they will not make the effort to move as they feel that, *"the time is short"* and they need to rest during breaks.

Head of department: *... no this is a fabulous staff no I must tell you everybody's very friendly towards everybody, I mean everybody has their own table and chair at which they sit and they don't socialise amongst each other at the tables during breaks as such, but at other times outside school I think when the atmosphere is more relaxed as such it's easier for everybody to just socialise with everybody, but everybody does, you know it's just during break times, because break is short and one doesn't have nothing one just wants to have a rest (laughs), it happens sometimes, but not as a rule.*

This statement by the head of department suggests that there is little discussion of pedagogy during break time. The mathematics teachers don't

have free periods at the same times, so there is very little other time available to discuss pedagogy. According to the head of department, discussions of pedagogy do take place:

Interviewer: *Do you find that they are more likely to share ideas socially?*

Head of department: *Yes, yes, yes, yes, yes definitely when just sitting around and talking to the other maths teachers as well, what they say and what their ideas are and what works for them and what doesn't work for them we are always discussing, and that's why I say we have so many sort of informal maths meetings, you know, not really meetings, you can't classify it as meetings but we are continually discussing what happens in the lessons, we always know what is going on in each others classes it's not as if it is a secret to everybody else or only the subject head knows, we know that this is difficult and the kids aren't grasping this and you know things like that.*

A junior teacher does not support the head of department's claim that discussions of pedagogy do take place. According to her the head of department doesn't converse with the two senior teachers:

Teacher: *...And she doesn't talk to them hey.....I thinks it's a woman female thing as well* (laughing) *but there's Mr. X and Mr. Y that also takes maths... since they are on the senior staff they like very different...*

According to the head of department there is no cross curricular collaboration between departments. She suspects that it may change with the introduction of Outcomes Based Education:

Interviewer: *Do you find you work with teachers in other departments in any way?*

Head of department: *In any way? Like...*

Interviewer: *Maybe where the subject areas overlap like scale and bearing and map work in geography?*

Head of department: *...uhhh no we don't really, I think we supposed to perhaps with the outcomes based but I think we must just get together each department individually first before we really get down to that, know how to do that.*

The seating in the staff room at Progress Private School is open plan and staff is conscious of rearranging couches and purposefully not maintaining the same seats throughout the year. They speak in terms of being part of different conversations, depending on where they are sitting.

Teacher: *...but socially, there are two people in the department I discuss work with socially W and Z. It depends on where I am sitting, I socialise with W and Z a great deal but if I'm sitting somewhere else then with other departments*

The lack of rigidity in the seating arrangement allows teachers to interact with different members of staff depending on where they are sitting. There is, however, a tendency for people within a department to form closer relationships.

Teacher: *I think you basically socialise with whom ever you are friends with it doesn't really matter which department, although you get to know the people in your department better, so you tend to socialise with them more although but I think I you generally stay with the people you get on with...*

At Progress Private School the staff interact during breaks and free periods as well as during meeting times.

Interviewer: *When do you share these difficulties and ideas?*

Teacher: *Socially as well as in meetings.... we talk about things in breaks or especially free periods after a bad lesson*

These teachers are accustomed to discussing their pedagogy with others. Discussions are not limited to teachers within their own department, as teachers do attempt cross-curricular work.

Interviewer: *Do you often discuss work with people from other departments?*

Teacher: *Socially ... yes we will discuss the kids we all teach or general stuff and even working with other departments, I do try to, like with the geography department in areas like scale and bearing, I'm trying to arrange something with them so that we both cover the work in a way that complements each other.*

Non-work related personal interactions:

Section overview:
The social structure shapes opportunities for the staff at both schools to cohere in non-work related settings. At Inheritance High School, the principal claims that staff is unwilling to attend social functions. Staff members claim that their interests are not taken into account in the organisation of these functions. At Progress Private School staff members organise non-work related functions and purposely vary them to encourage attendance. The teachers are enthusiastic about attending these functions.

Inheritance High School encourages staff to attend unofficial, non-work related functions but does not allow them to play a role in determining the type of functions or when they should occur. Most of these occasions are organised to take place during the holidays or after the term has ended so

they have little relevance to work. This results in reluctance by the staff to attend these unofficial functions.

Principal: *Yes but I find it's very difficult to get them to socialise (laughing). They always think that they can use the time better at home, because they always think that they rather... you know that they've got too little time at home, and for that reason I have basically been empowered by the governing body. If I feel that it's time for the staff to, to team build or to bond then I have got the power, the financial aid to do that. If I felt that they needed a drink now then, then I would call them together and say guys it's time out we need to just take a break...*

The lack of involvement of the teachers at Inheritance High School in organising non-work related functions lessens teachers' enjoyment of them.

Teacher: *... but really I couldn't see the sense in it really. I think she... it would have been better if we went on a weekend away or go to Ratanga or you know, to build team spirit or just to have fun and sort of ... the set up there was as it is at school, senior staff and us and you know, I don't know, but maybe for some people it worked but it didn't work for me.*

The head of the department claims that teachers in general sometimes work together *"not on the subjects, but sometimes in staff development and weekend away, but that has nothing to do with the school work"*. According to a teacher the barriers between senior and junior staff remain intact at these informal occasions. This barrier is at times re-enforced by the principal organising separate social occasions for the senior staff members.

At Progress Private School the staff organise and choose their own non work-related functions, as it is one of the teachers' portfolios to do so every term. According to the principal these events are purposefully varied in type to encourage participation.

In addition to these events, the mathematics department organise their own function once a term. These usually occur at one of the members' houses or at a restaurant. The purpose of these mathematics department functions was originally to give the teachers more time to work together, but this façade has been discarded and the principal also attends. According to the principal, the value of these occasions is that they instil a sense of belonging to the team.

Teacher 1:	*Oh good timing, we were just talking about the maths dinner... [to teacher 3]*
Teacher 2:	*Give the time you want to start and directions or a map.*
Head of department:	*How are we going to get there?*

[Discussion ensues about specific arrangements, regarding transport and kitchen duties and other general personal comments to each other.]

This validates the principal's claim that:

Principal: *...the staff needs to realise that they are part of a team and that we all need to work together and get along to be able to work together.*

The relationship between the repertoire and reservoir:

Section overview:
The main difference between the repertoires of the teachers at the two schools was the range of methods they used. The work of the teachers at Inheritance High School is very structured by the head of the mathematics department which limits the range of methods drawn from the teachers' own reservoirs. Progress Private School teachers are provided with resources which they use at their discretion in combination with their choice from a wide range of methods.

A teacher at Inheritance High School explained how she prepares for lessons:

Teacher: *You want my honest opinion [laughs], I'm so used to the work that...[the head of department] helps me to set out which modules or which chapters we have to do in the time and she also tells me which exercises she wants us to do and then I just, the night before I come to school go over the exercises and see that I understand everything and can explain everything and then I come to school.*

In this school where competence is narrowly defined in terms of the privileged pedagogy, this junior teacher would suffer a loss of esteem and self worth when interventions happen as a result of her inadequacy to maintain the set standards of discipline and achievement of "*results*". She would also not benefit from the inclusion of ideas from prior experience, as this would not

gain validation and esteem from colleagues, and could result in intervention from senior or more experienced members. This limits the teacher's freedom of choice from the reservoir, as there is a threat of a loss of esteem in the eyes of colleagues if a teacher does not comply with the school's notion of competence.

Interviewer: *Do you have any other ideas that you would like to put into practice particularly for the topics I watched?*

Teacher: *...you know I would like actually to bring photos to school, enlargements and reductions and let them measure specific things on the photo. I was thinking of that but I didn't get time to do that and ..umm ... with mixtures and the compounds I thought you know you can actually link that a lot to maths, ag to science and maybe I should bring some molecules or something to show them that the ratios will always be the same whether it's one glass of water or a tank full of water or one molecule of water but I never get around, you know, the time is too short.*

At Progress Private School teachers use their own discretion to make pedagogic choices. Having a flexible repertoire allows teachers to change

what they had planned for a class, and instead follow what the learners have picked up on.

Teacher: *...especially if it's something that I've never used before like if something didn't work for me last year. Then I'll try something new, and, if whatever I decide doesn't work, then I've got to, just like you know, wing it, and just see what happens. And I just take it from what the kids say, and I just build on what they're doing. I don't really, sort of really think about what I'd planned, I just leave all of that alone and just sort of build on what they are saying and what they are doing in class.*

The head of department suggests that discussion facilitate flexibility in their pedagogic practices:

Head of department: *We've kind of established how we do teach but we are open to new ways to teach stuff and when we get together we do discuss new ways such as interesting things we see at conferences or something found in a book. We also tend to discuss things we are having difficulty with and every body offers advice.*

The very definition of competence as defined by the principal of Progress Private School requires that teachers accommodate the changing needs of learners. This requires them to constantly experiment with new methods and ideas in the classroom to establish a diverse repertoire. The principal of Progress Private School claims that "the type of teacher that we employ" enables his vision. They must be able to set boundaries, continuously experiment with new methods in the classroom and ask for aid and assistance from their colleagues to further refine their ideas, and make personal choices about what to include in their repertoires from their reservoirs. Teachers feel that they have the freedom to choose from the reservoir as this would result in reaffirmation of their self-worth and esteem, as they would be complying with the schools notion of competence.

CHAPTER 5 – CONCLUSIONS:

This chapter derives insights from the data analysis to form an explanation of the way in which the culture of the school shapes the access teachers have to pedagogic reservoirs and how this affects the construction of their repertoires. Explanations are built both from theoretical understandings in the literature as well as from patterns found in the data that both support and revise these understandings. Patterns of practices emerge across the dimensions of culture in each school. The cultures of the two schools are different and shape the pedagogic choices of the teachers differently.

This chapter discusses these patterns with reference to each dimension of culture.

Values and associated pedagogy:

At each school, values are associated with the privileging of a particular pedagogy. The values identified in the schools in this study relate to learner identity, the goals of the school and the comportment of a competent teacher.

At Inheritance High School a specific pedagogy is privileged. The range of methods is narrowly defined and is thought of as a "best method" of teaching. The privileged pedagogy accomplishes narrowly defined goals, and excludes goals that would be achieved through other pedagogic approaches. Put more simply the aim of the privileged pedagogy is academic achievement. Other pedagogic practices associated with other goals such as teaching learners to share their understandings through group work are excluded. The learners are represented by both the teachers and the principal as

homogenous, in that they are all perceived as having the same needs from the pedagogy. The singular privileged pedagogy, is consequently pitched at an 'average' level. This pedagogy is described here as 'singular' or unvaried and narrow in its range of practices.

The singular privileged pedagogy is also associated with a narrow definition of a competent teacher. The behaviour of these teachers is narrowly defined by what is appropriate to the practice of this pedagogy. A 'competent' teacher at Inheritance High School, is well versed in the use of the singular privileged pedagogy and his/her practice is guided by the needs of the pedagogy to accomplish the goals as defined by the school. This can be illustrated by an example of the standard of discipline teachers feel is expected of them. At Inheritance High School, all teachers are expected to ensure that they are able to maintain a certain low noise level in all classes. This level must be maintained regardless of the subject matter or nature of the interactions between learners. Teachers must exclude and can exclude the use of any teaching methods that might result in raised noise levels, such as discussions, or group work. New teachers are expected to gain experience in the use of the singular privileged pedagogy and adapt their own practice accordingly.

Progress Private School is characterised by a diverse range of pedagogic practices, a wide definition of a competent teachers, diverse projected learner identities and diverse aims and goals. This pedagogy is described here as 'multiple', i.e. varied and broad in its range of practices. Multiple pedagogic practices are privileged each with its own goals. Similarly, as the range of valued pedagogic practices is diverse, the notion of teacher

competence at this school has a wide scope. Teachers are free, and indeed expected to engage in an evolving, experimental pedagogy that further diversifies the range of acceptable practices and creates flexibility in the pedagogy of teachers.

Sharing and induction:

The privileging of a multiple pedagogy is associated with sharing of pedagogic practices which promote access to both the individual and collective reservoirs of teachers. Sharing, which denotes a mutual, give and take relationship in this study, is associated with feedback loops. The privileging of a singular pedagogy is associated with induction into the use of this singular pedagogy and regulation of teachers' their behaviour. This induction is a unidirectional relationship in which one teacher is seen to possess knowledge thath must be passed down to the inductee.

At Progress Private School a multiple pedagogy is privileged. To maintain flexibility in their repertoires, it is essential for teachers to share as it provides them with insights and interpretations that they would not have access to through only relying on their own practice. Sharing to takes place within departments and across subject barriers. Members come to understand that to best serve the needs of the learners they need to share not only subject specific knowledge but also knowledge that is specific to certain learners.

Within the mathematics department the teachers use departmental meetings to seek subject specific guidance and advice from the other

mathematics teachers in the department. The subject-teachers of specific learners share their practice, to find effective ways of dealing with specific problems, and also to gauge the appropriateness of interventions and create consistency for learners.

The teachers at Progress Private School have developed an understanding about pedagogy that enables them to share. Regular sharing makes it non-threatening to teachers to share as they come to understand the value of sharing as making them become more competent teachers. Through sharing, teachers lose the need to judge the pedagogy of other teachers as the range of accepted pedagogic practices has wide scope and teachers are expected to make personal choices about the practices they will include in their pedagogic repertoires. New pedagogic initiatives are thought of as non-threatening as these methods are viewed as different ways to suit different needs. This understanding does not exclude the use of these new methods and therefore does not devalue their contribution. Teachers can make personal choices of what to include in their own repertoires depending on their interpretations of learners' needs.

Regular sharing both within departments and across departmental barriers, become routinised as established feedback loops which include all those who have an interest in specific issues – teachers, management, learners and parents. This enables teachers access to all the information needed to make decisions regarding the suitability of the pedagogy to the learners' needs and capabilities. Teachers have further access to knowledge about pedagogy and the learners through wider networks that include the primary schools from which learners come, and the high schools they will go

to. As part of the wider network the teachers become more apt at assessing the current needs of learners, as they are made aware of the backgrounds of learners and their role in supporting learners future growth and understandings.

At Inheritance High School, induction processes regulate the actions of teachers in the classroom and maintain consistency in the use of the singular privileged pedagogy. The pedagogy at Inheritance High School can be thought of as static or "traditional" as it is not required to adapt or change to different needs. Teachers engaged in this singular pedagogy have little need to share pedagogic insights with each other. Instead, teachers with many years experience in the use of the singular privileged pedagogy share, or model their own pedagogic practices. The singular specific pedagogy is inherited by, or passed down to, new teachers who then withdraw into their classrooms to rehearse and perfect their performances of this pedagogy.

The singular pedagogy at Inheritance High School is associated with particular practices within departmental meetings. Sharing is extraneous and teachers are discouraged from using the meeting as a forum for discussing pedagogy. The main purpose of these departmental meetings is to perform regulatory and administrative functions.

In order to keep the singular pedagogy 'pure' teachers are required to disregard their prior experiences and knowledge about other pedagogic practices. Teachers come to understand from the context of the school that any ideas not encompassed by the singular, specific pedagogy are not valued.

Teachers are not encouraged to draw on pedagogic practices developed in prior teaching experience in other schools, nor are they encouraged to experiment with different approaches.

Sharing and Induction associated with work related and non-work related relationships:

Horizontality in sharing through teachers working together, as part of a team is conducive to familiarity, informality and work related and non-work related relationships. Induction is conducive to more formal, hierarchical social relations based on the understanding that some members are knowledge providers and others inductees. This distinction between members with and without knowledge of the privileged pedagogy allows members to understand their role as unequal.

At Progress Private School, the need to share impacts on the relationships teachers form with each other. These teachers have genial, familiar and informal work related and non-work related relationships. They demonstrate cohesiveness as a staff and community of practice where all members have access to knowledge about pedagogy from their colleagues. This relationship makes sharing easier between members of staff and develops the understanding that teachers are able to contribute their own understandings to discussions without fearing criticism, as pedagogic variety is valued.

At Inheritance High School, induction changes the way in which teachers understand their roles in the school and the way they relate to other

members of the staff. Induction is a unidirectional process and as such teachers understand that there are levels of authority between members that changes the way teachers are able to interact amongst each other. Induction builds understandings between the members of staff that some are knowledge providers while others are apprentices. The teachers address each other formally and have almost businesslike relationships with each other. The relationships they form and the understandings that surround them, limits how meaning is shared between teachers and this limits access to knowledge through these relationships. This is evident in work related and non-work related.

Autonomy and Regulation:

In order for teachers to diversify their pedagogic practice, they must have autonomy in the classroom. This enables them to become confident enough to develop, and diversify their own practices and to share these with others. On the other hand, teachers who are required to conform to a singular pedagogy are regulated in order to protect the consistency of that pedagogy

According to the principal, the teachers at Progress Private School have total autonomy in the classroom. They are free to experiment with new ideas and have developed flexible repertoires. The teachers claim to be able to leave what they had planned if they see it's not working and develop a lesson based purely on ideas the learners have picked up on. Teachers explain that they share ideas and resources with each other both formally and informally as they discuss the ideas they have experimented with and ask

each other for advice, and other methods if they feel their way of explaining has not worked. The teachers make personal choices from the advice and guidance they are given. They decide what to include in their repertoires from the wider reservoirs they are exposed to as some methods are not suited to them or their particular style of teaching.

The teachers at Inheritance High School are monitored directly and through the results the learners obtain. Explicit monitoring is associated with limiting teachers' choices from the individual and collective pedagogic reservoirs as they are aware that the use of certain methods cause raised noise levels and will result in intervention into their classes. Such intervention causes these teachers to lose esteem in the eyes of colleagues and to doubt their own self worth. These fears cause teachers to withdraw into their classrooms and refrain from sharing their personal reservoirs with others.

Horizontal and Vertical Authority Structures:

The authority structure of each school shapes communications within the schools differently.

At Inheritance High School teachers are not involved with decision-making about learners and pedagogy and have no need for this knowledge. Teachers with longstanding experience in the use of the privileged pedagogy are regarded as possessing specialised knowledge and are selected for posts as heads of departments. This allows them to exert influence over the pedagogy of the other teachers in the department.

The head of department comes to understand her role through being granted this authority to influence pedagogy and understands this to mean that other teachers need to be moulded to become like her. She sees herself as an example or role model to the other teachers in the department with less experience. Part of her role at Inheritance High School is to structure the work of the other teachers in accordance with the pattern and pacing of her own work and in this way, she exerts influence over their work.

As the singular, privileged pedagogy is regarded as a tradition which is handed down, the structuring of the work has not changed over time. Furthermore the head of department will exclude other pedagogic practices through the way the work is structured and the explicit pacing of the work. An understanding within the school that teachers can only gain authority if they show competence in the privileged pedagogy supports this.

The head of department has the authority to ensure consistency in the pedagogy of the other teachers in the department. She monitors their work, which reaffirms her authority, and exerts pressure on other teachers to conform to what is expected of them. Monitoring is a way of excluding undesirable pedagogy at the school by making teachers aware of the lack of value, esteem and authority that is associated with other pedagogic practices.

The privileged pedagogy is reinforced by the structuring of the teachers' work, through the time made available to them, which also affects teachers' understanding of their role in the classroom. Teachers are led to understand that they lack the time to experiment with pedagogy, and if they want to gain esteem through accomplishing what is expected of them at this

school they need to use the singular privileged pedagogy that is suited to the time made available to them.

At Progress Private School where pedagogic practices are multiple and diverse, teachers have authority to make individual decisions over what to include in their repertoires based on the specific educational needs of their learners. The institutional structure is horizontal and pedagogic authority is not vested in any one individual over another teacher. As all teachers have authority to make decisions at this school, they can all be considered as possessing specialised knowledge, which makes decision-making possible.

Different forms of Authority:

At both Inheritance High School and Progress Private School, there is a tension between pedagogic and administrative authority. The way in which this tension is resolved is compatible with the pedagogic approach in each school.

Inheritance High School has a vertical, hierarchical management structure within this structure; there is a distinction between senior and junior posts. However, teachers in senior posts may be relatively new to the school and inexperienced in the privileged pedagogy, while in some cases the opposite may be true of junior teachers. This may result in a tension between the positional authority of a senior teacher and the pedagogic authority of a junior teacher.

Management at Inheritance High School has resolved this tension, by selecting only teachers who do have experience in the privileged pedagogy as

heads of department. Heads of department are expected to 'guard' the privileged pedagogy. Thus, a junior teacher in a head of department position can extend pedagogic authority over a senior teacher.

At Progress Private School where a horizontal authority structure exists, a tension arises between the horizontality of collegial relations with regard to pedagogy, and the requirement that those with positional power wield this to ensure accountable teaching practices. Heads of department are still required to check, for example, that teachers complete the syllabus. This tension is resolved by separating administrative authority from pedagogic authority. Decision-making that affects pedagogy is in the hands of the teachers who each possess pedagogic authority, while administrative authority allows decision-making regarding the running of the school to happen in groups according to portfolios. The head of department at Progress Private School understands her role as part of a collective of equally capable teachers. Her main task is to provide structure to the department to allow teachers to interact.

The Organisation of Time and Space:

The structuring of time and space is compatible with the pedagogic approach which is privileged at each school.

At Inheritance High School, meetings are not essential to the practice of teaching or the pedagogy, and for this reason, are not regular or predictable in occurrence. Senior teachers decide if and when staff meetings take place. As their ability to make decisions does not necessarily relate to influence over

the pedagogy, unless they are heads of department, the timing of these meetings is not necessarily opportune to promoting the discussion of pedagogy. There is an understanding that the purpose of these meetings is mainly administrative and therefore teachers need little notification about these meetings. As a result these meetings would not have agendas, which would generate discussion of pedagogy. In meetings, the head of department explicitly structures the teachers' work.

The way in which time is structured at Progress Private School makes provision for teachers to interact, and the structuring of time for departmental meetings for each subject relays an understanding about their importance.

The meetings at Progress Private School are regular in occurrence with substantial notification of them. Teachers have come to understand that they need to prepare for these meetings on a regular basis. This also allows for a set agenda to be drawn up for each meeting and this provides the structure for each meeting. The agenda signals what is regarded as important and promotes discussion of all facets of work, providing teachers with access to relevant knowledge. For example, if an agenda makes provision for learner/ parent feedback, teachers come to understand the importance of relaying information regarding learners to other members of the community of practice, as part of a well established feedback loop. If the agenda provides for the discussion of special needs of learners, teachers would understand their role in accommodating special needs and would share their experiences with other teachers, to find effective ways of dealing with these needs.

At Inheritance High School, the spatial structuring of the staff room divides the staff into groups around tables. Teachers have specific seats in

the staff room and do not move from this seat as they claim the breaks are short and they need to rest. In effect this limits teachers' access to knowledge through interactions, as there is little interaction between members who occupy different tables. At Progress Private School, the staff room is open plan. Teachers are conscious of not occupying the same seats each day and they move furniture according to where they want to sit. This enables them to participate in different types of work and non-work related interactions within or between departments.

The spatial organisation of subject classrooms at both schools provides more interesting insights. At Inheritance High School the junior teacher explained that she suspected that she was placed in a classroom between two head of departments (the mathematics subject head and the accountancy department head) to allow them to monitor her more closely. The classrooms are arranged in relation to junior teachers being placed near the teachers with specialised knowledge. At Progress Private School the classrooms are arranged according to the subject being taught. All the mathematics teachers have classrooms in one corridor. This allows them to consult each other between lessons and share resources between them.

The time made available to teachers to experiment during lessons is 50 minutes per lesson at Progress Private School and 35 minutes in the case of Inheritance High School. The teachers at Inheritance High School complain that the lesson times are too short to allow them to experiment with other ways of teaching and this helps to ensure consistency in the practice of the singular privileged pedagogy.

School culture and pedagogic change:

The understanding of the relationship between the institutional structure and communication that emerges from this study is that they are mutually constitutive. This means that a change in practice involves changing the communications and the structures (see Hargreaves 1984 cited in Hatton 1987). By the same token, the existing structures and meanings shape the school's response to change initiatives.

Progress Private School has a culture that values multiple pedagogic practices. As this pedagogy is constantly in the process of evolving it is more likely that change will be more easily accomplished because of the ease with which new methods and new ideas are accepted and experimented with. The teachers have malleable repertoires, and are adaptable to the changing needs of learners. As long as the change in pedagogy is additional to the teachers' own repertoires, teachers do not risk loss of esteem or self worth through experimenting with the new pedagogy. However, teachers would be likely to resist a change towards a singular pedagogy as a flexible, multiple pedagogy is valued and is the basis for esteem.

At Inheritance High School pedagogic authority is vested in heads of department, based on their experience with the privileged pedagogy. This creates resistance to changing the pedagogy as heads of department risk losing the authority that was previously granted to them and this causes them to doubt their self worth and fear losing esteem in the eyes of colleagues.

The introduction of Outcomes Based Education provides an example of the difficulties associated with changing pedagogy at Inheritance High School.

The head of department represented the school in departmental workshops related to Outcomes Based Education. Other teachers who have modelled their teaching on that of the heads of department also resist change as they have bought in to the culture of the school. They fear having to adopt a new pedagogy, which may not highlight the positive aspects of their practice, and this causes them self doubt and fear of losing esteem.

Other teachers were not informed of the process or granted access to the understandings about pedagogy and practical suggestions that resulted from these workshop or conferences. The then head of department did not permit other teachers access to the knowledge she had gained from attending these forums as this knowledge reaffirmed her authority over the pedagogy and changes which were to occur. The current department head has no knowledge gleaned from these forums. Her access to knowledge regarding her own role as well as her knowledge of pedagogic changes is severely limited. She maintains the privileged pedagogy with the addition of the Outcomes Based worksheet which her predecessor put into operation.

The junior teacher in the department had no idea as to the purpose or importance of the Outcomes Based worksheets. She nevertheless introduced the use of them as required.

At Inheritance High School the privileging of the singular pedagogy is valued as strength and as such it becomes difficult to change.

This example of a schools' response to change illustrates the main thesis of this study: Pedagogic practices are embedded in both dimensions of

school culture – structure and meaning. These dimensions are, in turn mutually constitutive.

Limitations of this study:

The aim of this study is to build a theoretical explanation for the way in which school culture shapes the repertoires of teachers at each of the two schools. As the purpose is theory building this study only claims generalisability of the theory which is developed, it does not claim to be empirically generalisable. In other words, the study makes claims about the constitution of culture and the ways in which this shapes pedagogy. It does not claim that the content of either culture or pedagogy is similar in other school.

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Appendix 1

Classroom observation schedule

CLASSROOM OBSERVATION SCHEDULE for .....School

Date:.....
Name of teacher:.....
Grade:.....
Lesson Content:.....
Time lesson started:.....
Duration of lesson:.....
Number of learners.....

Time	Actions of the Teacher	Notes / Thoughts

Appendix 2

Staff meeting observation schedule

STAFF MEETING OBSERVATION SCHEDULE

School:.....

Date:.....

Time:

Purpose of meeting:.....

When:.....

Where:.....

Who:.....

.....

.....

How notified ?.....

How is the agenda decided?

.....

.....

Who is the chair and what is their position?

.....

What is the procedure?.....

.....

.....

Observations:

(1) Is pedagogy discussed? - If so for what purpose?

(2) Who contributes to discussion?

(3) How is this done?

(4) How are decisions reached?

(5) Who has the final say?

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Appendix 3

Mathematics department meeting observation schedule

DEPARTMENTAL MEETING OBSERVATION SHEET

School:.....
Date:.....
When:.....
Where.....
Time :.....
Name of teachers present (code): (HOD *)
.....;.....
.....

Discussions:

(1)Who initiated the discussion?

(2)How was action decided upon?

(3)How are decisions made?

(4)Is content discussed?

(5)Is pedagogy discussed?

(6)Is there shared work?

(7)How are issues of power handled?

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Appendix 4

Teacher tracking schedule

TRACKING OBSERVATION SCHEDULE

School:.....

Date:.....

Name of teacher:.....

Context: On a break / in a meeting / free period.....

Time	Participants (+ department)	Activity of teacher

Appendix 5

Principal interview schedule

PRINCIPAL INTERVIEW SCHEDULE

School:.....

Date:.....

Time:.....

1. How would you describe the school? - what is its ethos?
2. What is your view on the purpose of education?
3. What is your vision for the school
4. How are you implementing measures to accomplish your vision?
5. How is the school managed? Is there a management team?
6. What procedures are followed to make decisions?
7. Why are decisions made in this way?
8. How are decisions made regarding pedagogic practices?
9. How are decisions made regarding procedures for discipline?
10. What is your idea of a competent teacher?
11. How would you deal with an incompetent teacher?
12. What type of development opportunities do you provide for your staff?
13. Do you believe it is important for your staff to socialise? If so, why?
14. How do you select teachers for posts at this school? What is the procedure and who is involved in this procedure?

Appendix 6

Head of mathematics department interview schedule

HEAD OF DEPARTMENT INTERVIEW SCHEDULE

School:.....

Date:.....

HOD Name:.....

Time:.....

1. **How does the maths department function?**

- Do you have regular meetings?
- What is the purpose of these meetings?
- What types of issues gets discussed? - the content? Ways of teaching? The learners and parents?

2. **Are there any rules or policies particular to the maths department?**

- How work is set-out or discipline policies ?
- How do these measures operate?
- How were they decided upon and put in place?
- Do these rules ever get reviewed?

3. **What do you see your role to be as HOD?**

- Do you teach?
- How would you teach .....(the content of the observed lesson)?
- Do you provide guidance for the other teachers in your department?
- Do you assist with discipline or pedagogic queries?
- Do you provide resources?
- Do you play a role in the choice and appointment of new teachers to your department?

Appendix 7

Teacher interview schedule

TEACHER INTERVIEW SCHEDULE:

School:.....

Date:.....

Name of teacher:.....

Lesson content observed:.....

Grade observed:.....

Date observed:.....

The Lesson.....

1. **How did you go about planning this lesson ?**

- How did the lesson go?
- Did you have to change anything during the lesson?
- Is this your favorite way of teaching this lesson?
- Have you taught it this way before? - if not why have you changed ?
- Where are the ideas from? (other teachers; resource books; conferences?)
- Do you have any other ideas you might like to try in teaching this lesson?
- What are the constraints to your ideas ? - resources? Authority e.g., maths dept or principal? Class size? Time; space?
- Are you aware of the way in which other teachers in the department teach this lesson? - are you aware of how your head of department teaches this lesson?
- Do you ever ask the HOD for guidance in any matters?
- Do you share ideas and resources socially or just in meetings?
- How do you decide how to structure the work?
- How do you decide how much time to devote to a concept?

The department....

2. **How does your department work?**

- Do you have formal meetings and how often?
- What is the purpose of these meetings?
- Do you discuss content or share ideas or discuss incidents with learners or parents?
- Do you ever work with anyone? - on what? -drawing up tests and exams; drawing up worksheets? ;formulating ideas?
- Do you always work with the same person? - Why ? Who? With teachers from other departments?
- Are there certain rules particular to the maths department ? either to help with discipline or things like the set-out of the work?

The school....

3. **What opportunities are available in terms of staff development ?**

- Are there opportunities for group work?
- Who do you usually work with? - why?
- Does everybody socialise together during free periods or breaks?
- Does the school provide any opportunities for the staff to socialise together?