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The effectiveness of indicators in measuring school based poverty. A case study of the application of Norms and Standards for School Funding in the Western Cape.

A research report submitted in partial fulfilment of the requirements for the award of the degree

MASTER OF EDUCATION
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DECLARATION

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

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ABSTRACT

This 10 000 word report looks at the application of the Norms and Standards for School Funding policy with respect to whether it fulfills its aims of equity and redress. The type, nature and weighting of indicators used in applying this policy at two previously disadvantaged Western Cape secondary schools, which have different socio-economic backgrounds, is examined through a review of the funding allocation received by these two schools.

The patterns emerging from this study indicate that the current variables and their weightings do not clearly distinguish between the two schools sufficiently. The reasons for this being are:

- The relative weak weighting of the income indicators that otherwise clearly have the ability to strengthen differentiation between schools.
- The cancellation of the potential effect of income indicators by the relatively good conditions of new school buildings in disadvantaged communities.
- The omission of unemployment levels in communities, which affects the overall fee and fundraising capacities of schools.

It is therefore suggested that the variables be further fine-tuned and/or the Norms and Standard for School Funding be expanded or reviewed because learners in the lower socio-economic brackets still tend to receive less funding per learner when provincial allocations, school fees and fundraising revenues are taken into account.

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Chapter 1

An Outline of the Report

1.1 Introduction

This report looks at the application of the Norms and Standards for School Funding policy (Government Gazette No. 19347) first published in 1998, with respect to whether it fulfills its aims of equity and redress. The type, nature and weighting of indicators used in applying this policy at schools will be looked at in the form of a case study at two Western Cape secondary schools, as well as their subsequent effect on the funding allocation received by these two schools.

1.2 Background to the Funding of Education

There has been a marked shift in education policy development since the April 1994 elections with the installation and establishment of a national Ministry of Education and nine provincial education departments.

The Constitution of the Republic of South Africa (Act 108 of 1996) guaranteed the right to basic education (Section 29(1)). According to Bekker (2000) the state has to make money available for the building and maintenance of schools, ensure teachers are trained and paid, books and other material for schools are purchased and that good standards of education are maintained. As the South African Government was a signatory to the International Convention on Economic, Social and Cultural Rights (ICESCR) in October 1994 where Article 13(2)(a) makes it compulsory to provide basic and free education (Vally, 2001:5), the provision of basic and free education is an obligation and incumbent upon any state party regardless of its economic circumstances (Vally, 1998a:30).

The legacy of the apartheid education system was deeply skewed in terms of funding and resource provisioning that favoured previously white classified schools at the expense of the vast majority of under-resourced black schools. Various levels of resource provision also existed for Indian and coloured schools between these two ends of the spectrum. Gilmour (2001: 8) highlighted the inequalities in South African education, amongst others, the disparities in learner per capita expenditure in 1994 where white learners were receiving 2,5 times more per capita funding than black learners. The challenge facing the new government was to address these inequalities by developing policies around school governance and resource distribution in schools.

The passing of the South African Schools Act (No. 84 of 1996) (SASA), which replaced the Education Acts of the apartheid government, aimed to address the above by reversing the process of unfair discrimination based on ethnicity, race and colour within the education system through the creation of a new national schooling system void of sexism, racism and intolerance where everyone had an equal opportunity to develop their talents (Department of Education [DoE], 2000:8).

According to the SASA, the state has a basic responsibility to finance schools on an equitable and fair basis. The SASA also clearly states that the state could no longer afford to finance schooling as had been done in the past. Other sources of income would be required to supplement this shortfall. This placed an added responsibility on every School Governing Body (SGB) in South Africa to supplement the state's allocation through the collection of school fees and various fundraising activities (SASA, No. 84 of 1996, p. 24, paras. 34-36). While the SASA aims to equalise current state expenditure per learner, it does not provide for the redress of historically accumulated gaps in education provision nor does it ensure moves towards equalising the total expenditure per learner (Greenstein, no date: 2).

The introduction of the Norms and Standards for School Funding (Government Gazette No. 19347) in 1998 was to give effect to the funding provisions for public schools in the SASA. The aim of this policy was to redistribute recurrent non-personnel expenditure to

the neediest learners within a province. This policy demands that provincial education authorities rank schools according to their levels of poverty and redistributes its available funding to its neediest learners.

This report studies two schools in the Western Cape and illustrates the application of various funding policies between 1998 and 2001 and the attempts by these funding policies to address equity and redress within schools. These schools have been selected because both schools were classified as previously disadvantaged schools and are situated in areas of different socio-economic backgrounds with one school serving a previously advantaged coloured community and the other serves a previously disadvantaged black community. This report looks at the funding measures adopted by the Western Cape Education Department (WCED) to redress the inequities of the past.

1.3 Rationale for this Report

The Norms and Standards for School Funding is the most important redress tool in provincial education departments. From a public point of view, it is important to monitor whether redistribution does in fact meaningfully take place to the poorest of the poor schools. Although many schools that were classified as black have been disadvantaged, it is also true that some black schools were even more disadvantaged than others. This report therefore, looks at the impact of this redress measure. Hence, the following research question has been used:

Do the indicators reliably distinguish between previously disadvantaged schools, which have different socio-economic backgrounds?

1.4 Methodology

In order to examine the effect of these funding policies the following methods were used:

(a) Interviews:
- Multiple interviews were conducted with officials from the WCED to establish how the WCED allocated funds to schools.
- Principals of schools.

(b) Technical Data:
- The resource-targeting tables of the WCED were used to indicate the relative ranking of schools and the basis on which monetary allocations were made to schools.
- The financial allocations and statements of schools.
- Data comparing provincial education departments' Norms and Standards for School Funding allocations for 2000/01 and 2001/02.

1.5 Chronological Layout of Chapters

In the ensuing chapters, Chapter 2 will look at an overview of education funding in South Africa in terms of the budgetary process at national and provincial level, policies pertaining to the SASA and Norms and Standards for School Funding, its interpretation and implementation in the Western Cape.

Chapter 3 will look at the analysis of the variables used to inform the Norms and Standards for School Funding in the Western Cape at two schools, the supplementation thereof and whether redress and equity could be addressed using these variables.

Chapter 2

The Funding of Education

2.1 Introduction

This chapter examines the national funding mechanism and illustrates the different phases of redress. It also looks at the application of the Norms and Standards for School Funding policy in the Western Cape and the adjustments that have been made in the period 1998-2001 in order to achieve greater equity.

2.2 Overview of National Education Funding

Currently, all public revenue is collected at national level. The total national revenue is then distributed between national government and each of the nine provinces. The distribution of public funds between national and provincial levels is called the *vertical split*. The vertical split is decided by national cabinet and is not based on an objective funding formula. Cabinet is informed by the Budget Council and the Minister's Committee on the budget. Cabinet arrives at the vertical division of revenue based on political considerations and the service delivery requirements of the three different spheres, i.e. national, provincial and local government. For the last few years, incremental budgeting has taken place and this simply means that adjustments to the annual spending envelopes are made by taking inflationary pressures into account. Invariably, because provinces have to deliver the bulk of the services, they received the bulk of the funds (Heintz, 1998:5).

The distribution of funds among the nine provinces is called the *horizontal split*. The horizontal split is determined by an objective equitable share formula that calculates the percentage share that goes to each province. The formula is based mostly on demographic and economic indicators (Department of Finance [DoF], 1999:60). In terms of the Constitution of the Republic of South Africa, a statutory independent body called the

Finance and Fiscal Commission (FFC) makes recommendations on the division of funds between provinces to national parliament. Although the FFC is required to make recommendations on both the vertical and the horizontal split, most of their recommendations have focused on the horizontal division of revenue. It is important to understand that the FFC does not determine the actual allocation of funds. Final allocations to provinces are determined by Cabinet. Funds received by the provinces from national government are unconditional grants or lump sums of money. The provinces then independently decide how much money they want to spend on education. The Constitution prevents the national government from directly influencing provincial governments on how they must spend their funds (Heintz, 1998:5). Allocations made to individual schools from the provincial education budget are based on guidelines set out in the National Norms and Standards for School Funding.

Expenditure on education can be divided into two distinct areas, i.e. personnel and non-personnel expenditure. On average across the nine provincial education departments, personnel expenditure currently consumes 90% of the budget and non-personnel 10% of the provincial education budgets. In the Western Cape personnel expenditure consumes on average 85% of the budget, while non-personnel expenditure consumes approximately 15% (Butterworths, 2000: 47).

In 1997, the then national Department of State Expenditure, the Western Cape Provincial Cabinet and Western Cape Treasury argued that 90% spending of the education budget on personnel was too high (WCED, Covering letter for Circular 0099/1997 from B.P. O'Connell, Head of WCED to Heads of Educational Institutions and Services dated 28 November 1997) and severely curtailed the provision of services, facilities and resources. Therefore, a national policy target on non-personnel expenditure has been set at 20% with 15% aimed at being achieved by 2005 (National Norms and Standards for School Funding [DoE], 1998:9, paras. 26-27).

In spite of the limitations on incurring additional spending on educators, there was still a need to provide educators on an equitable basis to previously disadvantaged schools.

Although the Western Cape had an average pupil:educator ratio of 20:1, these aggregate figures disguised disparities within the province, i.e. African schools had pupil:educator ratios of 41:1 compared to coloured schools with ratios of 20:1 (Crouch, 1995:15). The process of re-deployment of educators from areas of surplus to areas of need implied that the state did not intend to increase its wage bill, but merely wanted a more equitable redistribution of educator resources (WCED, 1999b:5). All of this was intended to protect the non-personnel spending base out of which the Norms and Standards for School Funding allocations were to be funded. Should the national policy target of 80:20% be attained, as recommended by the World Bank (Vally, 1998b:8; Van Zyl and Walker, 1998b:2), funds could be released for the purpose of redress. The reduction of current personnel expenditure through the abolishment of 8 000 posts by the WCED would free additional funding which would be used for equity and redress purposes amongst schools from different socio-economic backgrounds (Singh, 1999:3).

The following section briefly explains the Norms and Standards for School Funding policy of the Department of Education. The school funding policy is set out in a regulation issued by the Minister of Education in terms of Section 35 of the SASA of 1996 which allows the Minister of Education to lay down norms and standards for the funding of schools.

2.2.1 Norms and Standards for School Funding

An overarching aim of both the Constitution of the Republic South Africa and SASA was to address the inequities of the past. The Norms and Standards for School Funding policy would be used as a mechanism to redress these past injustices by redistributing non-personnel expenditure in such a manner that poorer schools would receive a greater allocation of the state subsidy thereby reducing the need to further tax poor communities through the raising of additional funds in the form of school fees and/or fundraising. Relatively richer schools would therefore receive a lower allocation from the state, which would result in greater need to raise funds through school fees and fundraising activities in order to maintain their existing levels within education.

In order to assist with the classification of schools, schools were to be sorted and ranked, based on "need" or "poverty", using two equally weighted factors (DoE, 1998:25, para. 101). These were:

(a) *The physical condition, facilities and crowding of the school*

Provincial education departments would be allowed to use indices based on a range of physical facilities at the school, learner-classroom ratio, condition and need of repairs, availability of basic services using the School Register of Needs data. This factor is weighted 50%.

(b) *The relative poverty of the community around the school*

Provincial education departments would be allowed to use Census, household survey or other data to create indices, e.g. proportion of households with electricity and piped water in the community served by the school, level of education of parents served by the school, and other similar criteria. This factor is weighted 50%.

Each provincial education department has to rank schools based on the conditions at the school and the poverty of the community served by the school so as to produce five groups of schools, ranging from the poorest to the least poorest school as illustrated in the table below.

***Table 1**: Resource targets based on the conditions of schools and the poverty of communities.*

School quintiles, from poorest to least poor	Expenditure Allocation	Cumulative percentage of schools	Cumulative percentage non-personnel and non-capital recurrent expenditure	Per learner expenditure indexed to average of 100 (Rands)
Poorest 20%	35% of the resources	20%	35%	175
Next 20%	25% of the resources	40%	60%	125
Next 20%	20% of the resources	60%	80%	100
Next 20%	15% of the resources	80%	95%	75
Least 20%	5% of the resources	100%	100%	25

***Source**: National Norms and Standards for School Funding, 1998, p. 26.*

This categorisation of schools means that the poorest 20% of schools would receive 35% of the resources with the least poorest 20% of schools receiving 5% of the resources. In terms of expenditure per learner, a learner in the poorest 20% of schools would receive 7 times more funding per learner than a learner in the least poorest 20% of schools. Therefore, the bulk of recurrent non-personnel expenditure goes to public schools that have been classified as poor. Effectively this means that schools that have been classified as rich are increasingly expected to shoulder the financial burden of public schooling. This is evident by the small state allocations that are set aside for the least poor schools.

Although the Norms and Standards for School Funding specified a school's categorization for redress purposes based on (a) physical conditions and (b) relative poverty, this index was not due to be implemented until the start of the 2000 academic year. This index is discussed in detail in section 2.3.2.

The next section examines the funding of public schools in the Western Cape in terms of this province's interpretation of the Norms and Standards for School Funding.

2.3 Provincial funding of public schools in the Western Cape (1998–2001)

As indicated earlier, the funding of public schools has undergone several shifts since 1990 as well as since the introduction of the Norms and Standards for School Funding. All of these attempted to capture the idea of redress. Although the focus of this chapter is Norms and Standards of School Funding, a brief overview of these mechanisms is given below to illustrate the differences. There have been three clear phases of funding. For the purposes of differentiation, these are labeled here as:

(a) Fixed Grants for the funding period 1998-1999;
(b) Block Fixed Graded Grants in 2000; and
(c) Formula Driven Grants in 2001.

2.3.1 Fixed Grants Funding Period: 1998 - 1999

During this period schools received monetary allocations which could be divided into two areas, viz. stationery and books, and unscheduled maintenance (Van Zyl, 1998a:7-9).

a) Stationery and Books

The table below sets out the formula used to determine the per capita allocation to public ordinary schools for the purchase of stationery and books for the 1998 and 1999 academic years.

***Table 2**: The WCED formula for stationary and books.*

Category	1998	1999
Pre-Primary, Special, Remedial and Grade 1-3	R40	R32
Grade 4-6	R50	R38
Grade 7	R70	R42
Grade 8-9	R80	R54
Grade 10-12	R74	R55

***Source**: School Finance in the Western Cape, 1998, p. 9.*

It is evident from the above table that no redress measures were taken into consideration for this area and that all learners at public ordinary schools, dependent on their grade, received the same levels of funding regardless of their socio-economic background or classification under the previous educational dispensation.

b) Unscheduled Maintenance

The table below sets out the formula used to determine the unscheduled maintenance component of the monetary allocation for all public ordinary schools for the 1998 and 1999 academic years. A guaranteed minimum allocation of R2500 per year, for a school, would be given should the formula work out less than this amount.

***Table 3**: The WCED formula for unscheduled maintenance.*

Component	Amount
Instruction rooms	R40 per Room
Pupils	R4 per Pupil
Condition of building	Maximum of R5 per pupil depending on condition of building
Redress	Ex-HOA[1] Schools = R0 per pupil
	Ex-DET[2], HOD[3] and HOR[4] = R5 per pupil
	Church and Farm Schools = R10 per pupil
Hostels	Basic Allocation of R3500 + R10 per pupil

***Source**: School Finance in the Western Cape, 1998, p. 8.*

In terms of redress all schools classified black or disadvantaged under the previous educational dispensation received an amount of R5 per pupil regardless of their socio-economic background.

In order to address these shortcomings in terms of redress, the funding policy for public ordinary schools was redefined in terms of socio-economic and physical variables which would better capture the redress aspects for the 2000 and 2001 academic years. This is discussed next.

2.3.2 Block Fixed Graded Grants Funding Period 2000

The WCED implemented the Norms and Standards for School Funding policy on 1 April 1999 because this coincided with WCED's financial year (01 April 1999 – 31 March 2000) and became effective in schools in the Western Cape on 1 January 2000. The

During the apartheid era, the National Education Policy Act of 1967 promoted a racially and culturally segregated and differentiated education system which classified schools on the basis of the race of its learners (DoE, 2000:11):

[1] House of Assembly schools (Whites)
[2] Department of Education and Training schools (Blacks)
[3] House of Delegates (Coloureds)
[4] House of Representatives (Asian)

following two sections summarise Annexure D of WCED Circular 0084/99 on Norms and Standards for School Funding of public primary and secondary schools, and introduce the socio-economic and physical variables, and their design, testing and refining before the implementation of Norms and Standards for School Funding for the 2000 and 2001 academic years.

a) **Socio-Economic Variables**

Although the Department of Education makes suggestions as to how poverty can be measured, the Norms and Standards for School Funding explicitly allows education departments to best operationalise their own measures of poverty based on local contexts. This means that definitions of poverty would differ depending on the prevailing socio-economic circumstances in a province.

The WCED's main external data sources were the October Household Survey and the Income and Expenditure Study of 1995. These surveys contained aspects which could enable the WCED to verify the information submitted by public schools. The WCED also argued that data from the Census 1996 or surveys could not be applied to school communities, due to the high mobility of learners, especially between suburbs in metropolitan regions. Some learners, especially in the townships, were either bussed out or chose to go to schools in the surrounding suburbs due to better facilities of suburban schools or as a result of overcrowding in township schools. Therefore, the area in which learners resided would not necessarily be the area where they attended school (Garson, 1998:23).

During January 1999, schools were sent questionnaires to obtain data about their school communities. The data obtained from this questionnaire was later used to create the socio-economic variables to calculate the level of poverty of the community.

The following five socio-economic indicators were used:

- average annual income of parent communities;
- proportion of parents owning cars;
- proportion of former advantaged children;
- proportion of parents with tertiary education; and
- proportion of non-farm worker children.

These five indicators were combined into one single socio-economic index. The WCED then used this index to test the ability of this index to predict other indications of poverty or need. The department then decided that school fees would serve as an external definition of need. In testing the relationship between the newly created index and school fees, they found that communities that had been identified as poor also had a low collection of school fees. Communities that had been classified as rich were found to have had high school fees. Using these results, the department then decided that the socio-economic index was a powerful measure of poverty.

The Norms and Standards for School Funding policy also requires departments to develop indicators of the poverty at school. It is not enough within a schooling context to have an exclusively socio-economic focus, without looking at the actual conditions at school. The next section therefore looks at the way in which the WCED measures poverty at schools themselves.

b) Physical Variables

Information pertaining to the physical needs of a school was readily available in the form of the School Register of Needs Survey which was conducted in 1996 by a consortium comprising of the Human Sciences Research Council, the Education Foundation, and the Research Institute for Education, on behalf of the National Department of Education. This survey documented the facilities of all schools in the country and mapped every school on a Geographic Information System. The data obtained was to be used as a basis for planning and resource provision (DoE, 2000:19). Data drawn from this survey

highlighted the conditions that deprived learners from appropriate learning opportunities and exposed them to health hazards (DoE, 2000:38-39):

- the majority of schools do not have access to proper sanitation, i.e. 49% of schools use pit latrines;
- only 23% of schools had a tapped in-door water supply;
- 56% of schools do not have access to electricity;
- 55% of schools were in need of repairs; and
- 5% of schools were not suitable for education.

Failure to address these conditions would further perpetuate an unequal society and poverty.

Learner enrolment figures were also easily obtained from the annual Snap Survey questionnaires completed on the tenth school day of each year.

The following physical variables were chosen:

- whether running water is available inside the school;
- whether schools have electrical power;
- whether schools have flush toilets;
- conditions of buildings and material they are built from; and
- the number of learners per available classroom.

These physical indicators were thereafter combined with the socio-economic indicators to provide a combined index that is simple, based on relatively easily obtainable and verifiable data, and that properly takes into account the physical needs of the school.

After the first analysis in March 1999, strong statistical correlations were found between the combined index and the department's measurement of need, namely school fees. Repeated tests done on it increased the reliability of the conclusions based on it.

However, because some data obtained from schools showed inconsistencies, which skewed the analysis of results, principals were then requested in June 1999 to review the information that they had provided in the earlier survey. They were also informed that the WCED was now in the position to identify and eliminate contradictory data using mathematical formulae and the comparison of data obtained from other independent sources (WCED, 1999c:2).

Combining these variables and taking into account that Norms and Standards for School Funding requires equal weighting for physical and socio-economic variables, the combined index was compared to the predicted school fees to determine to what extent these indices were associated with socio-economic need, as reflected by school fees. High correlations and rank order correlations indicated that these criteria could be used to distinguish a school's needs fairly well. The simplest index was chosen, in which all ten variables carried equal weight. This means that the physical and socio-economic indicators had the same weighting as the Norms and Standards for School Funding legislation prescribed. This resulted in the ranking of schools by need and is described below in the next section.

2.3.2.1 Ranking of Schools

Applying the above combination of indices, schools were ranked and grouped into eleven groups (A-K) of almost equal size. Each of the groups comprises approximately 9% of the learners within the province.

The education budget of the WCED for the 2000 academic year, less personnel expenditure, amounted to R107 million, resulting in an average allocation per learner of R112 for the 2000 academic year (WCED, 2000a:4). Former Department of Education and Training schools, and schools situated in townships would receive R8 million more than what they received in 1999 (Johns, 1999:5). The following table below shows the allocation per learner across the eleven groups.

***Table 4**: Allocation of funds per learner.*

Group	Allocation of funds per learner in rands
A	196
B	179
C	157
D	140
E	123
F	112
G	101
H	84
I	67
J	45
K	28

***Source**: Western Cape Education Department, 1999, Circular 0084/99.*

Schools situated in Group K have on average school fees in excess of R1900 per year compared to schools in Group A with less than R100 (WCED, 1999a, Annexure D, para. 9). Using school fees as an index for socio-economic development, schools in Group A would be the poorest of the poor and therefore receive the largest allocation not only because of their acute socio-economic need but also because of the school's inadequate physical facilities.

Schools were then informed during September 1999, so that they could prepare their budgets, taking into account their allocations, for the ensuing year. A number of schools appealed against their allocations because, in some instances, schools within the same neighbourhood were receiving different allocations per learner although conditions were similar. Schools that were unhappy with their classification had the right to appeal in writing (DoE, 1998:26, paras. 103), before the end of September 1999 highlighting any extenuating circumstances that needed to be taken into account bearing the physical and socio-economic variables in mind. This had to be fully substantiated and accompanied by

a copy of the school's budget for the current year and details of the current school fees certified by the principal and chairperson of the SGB.

Because of the weighting given to physical school variables and that there had been a drive to upgrade and/or build new schools in previously disadvantaged areas (WCED, 2000b:3), many schools in poor communities ended nearer to the middle of the index, as their physical facilities were closer to the accepted standard. Consequently a further refinement was made which treated schools separately rather than in grouped categories. This shift is described below.

2.3.3 Formula Driven Grants Funding Period 2001

During May 2000, schools received a Schools Register of Needs 2000 Update survey questionnaire, which requested principals to cross check information on infrastructure and other characteristics at schools as honestly and objectively as possible. Previously captured information from the initial School Register of Needs survey conducted in 1996 had been pre-printed on this form. Where information was wrong, missing or changed due to structural repairs or new construction, the correct, complete and updated information had to be submitted.

For the 2000 allocations, schools had been classified into 11 categories, for 2001 these separate categories had been dispensed with, and the allocations were now formula driven fitting along a continuum (WCED, 2000a:4). Each school had now become a category on its own influenced by its own set of conditions and variables. The weighting for the level of poverty of the school and community remained the same for 2001, however refinement was now taking place in the use of variables. Race as a variable (percentage white learners) was removed and the remaining variables weighting for 2000 were all reduced as highlighted in the table below:

***Table 5**: Comparison of Western Cape Education Department's Indicators and Weighting Used.*

Poverty of Community			Poverty of School		
Variables	**2000**	**2001**	**Variables**	**2000**	**2001**
Tertiary Education	10%	6.0%	Water Supply	10%	1.5%
White Learners	10%		Toilet Type	10%	1.5%
Cars	10%	6.5%	Electricity Supply	10%	1.5%
Farm Learners	10%	6.0%	Wall Type	10%	7.5%
Income	10%	6.5%	Learner-Classroom Ratio	10%	7.0%
Census 1996:		25%	Public Works Building Audit		6.0%
Water Supply			School Phase		7.5%
Education Level			Administrative Support		4.5%
Income			Average REQV[5] Value of Educators		4.5%
			Av. Personnel Cost Per Learner		8.5%
Total	50%	50%	Total	50%	50%

***Source**: Western Cape Education Department (2001) "2000 Norms vs. 2001 Norms", Mimeo, Office of the Research Directorate, WCED.*

The reason for the changes was that it was felt that information initially obtained from schools and the provincial education department (shaded in grey) was not distinguishing sufficiently between the various socio-economic groups when ranking schools from poorest to least poorest. The reliability of data obtained was questionable due to its self-reporting nature by principals and officials of the relevant departments, as the incentive for supplying information by schools, was to portray a school and its community at its worst in order to receive higher levels of funding. External sources of data were therefore needed to correlate with the existing variables and to assist in defining more clearly the distinction between schools, especially poor schools. These included data from Census 1996 although outdated, yet more reliable, Annual Snap Surveys, Building Audit, salary

[5] REQV refers to the qualification level of educators in public and independent schools. The basic unit of calculating a REQV is the highest schooling standard passed plus number of years trained professionally as an educator.

and qualification levels of personnel at schools. These external sources of data would hopefully assist in ensuring more appropriate allocations for 2001 taking into account the provisioning of staff, equipment and general milieu of the school.

Since allocations are done on a sliding scale, poor learners and schools would be far closer to each other as measured by poverty criteria and would lead to a situation where the benefits of redress funding are more evenly spread amongst poor learners (Wildeman, 2000:6). In order for the aims of this policy, i.e. the distribution of redress funding, to be successful, carefully chosen variables have been used to create indices that are reliable and make clear distinctions between the different socio-economic groups.

The resultant increase in the education budget for this period allowed the amount made available to Norms and Standards for School Funding to be increased from R107 million in 2000 to R131 million for 2001 (WCED, 2000a:4). The increase in the education budget has afforded education departments the opportunity of bringing a greater number of poor learners into the top re-distributive categories (Wildeman, 2001b:14). Although the minimum allocation per learner remained at R28, the maximum was increased from R196 in 2000 to R198 for 2001.

The additional funding made available was used to increase the allocation to schools in the middle spectrum. Although schools which are situated in the middle spectrum are not much better off than the poorest schools, this resulted in schools situated in the middle spectrum receiving R157 in 2001 compared to R112 in 2000.

Together with the refinement of variables, The WCED also laid down conditions to the Norms and Standards for School Funding 2001 allocation.

Allocations to schools were made under the following conditions (WCED, 2000a:3):

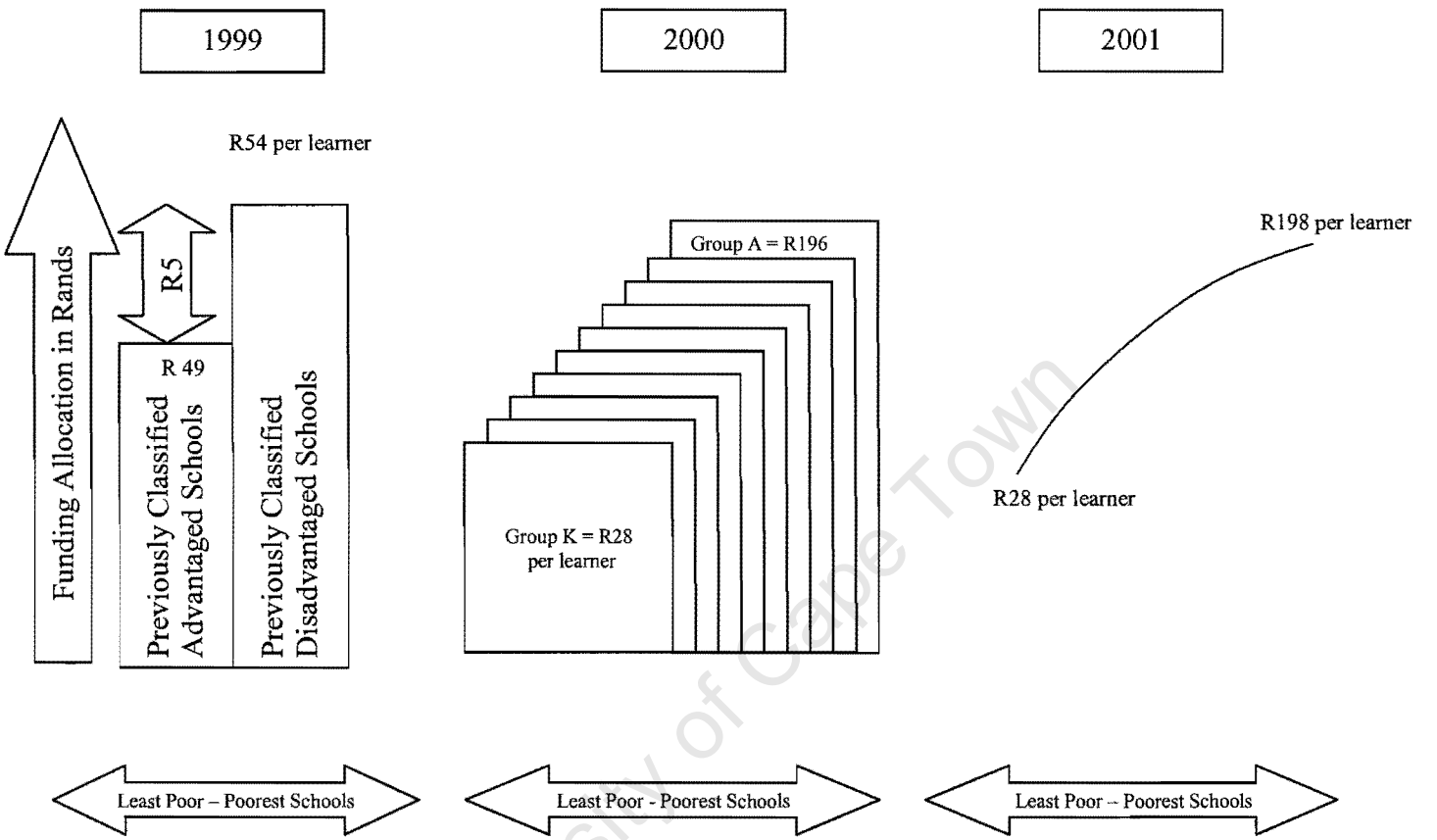
- All school funds, both from the state allocation and school's own income, are to be used for purposes directly related to education, especially for the buying of textbooks and other learning materials.
- Total income from all sources, i.e. state allocation, school's own income (school fees and fund raising), etc. to be regarded at a minimum of R300 per learner, as experience has shown that it would be difficult to run a school effectively on less than this amount.
- At least R15 per learner is budgeted, from the total income, towards the maintenance of buildings or R1500 whichever is the larger amount.
- At least R100 per learner shall be spent on textbooks. If a school wants to spend less than R100 per learner on textbooks, such a decision must be formally taken at a meeting of the SGB after consulting with the Circuit Manager of a school.
- The SGB must apply strict control over payments.
- The WCED has the right to inspect the school-fund records and to act against any of the WCED's personnel, SGB's personnel or members involved in any mismanagement of the school's fund.
- All schools receiving an allocation must submit an audited set of financial statements for the year ended 31 December 1999.

The evolution of the funding strategy indicates how poverty targeting has become more sophisticated in its identification of poor learners. The following section summarises this evolution and graphically illustrates a more differentiated poverty targeting strategy over a period of three years.

2.4 Conclusion

The illustration below highlights and summarises the evolution of funding for schools in the Western Cape from 1999 to 2001.

***Illustration 1**: Different Funding Mechanisms in the Western Cape for the Period 1999 – 2001.*



In 1999, the school funding model was simplistic in design with only 2 categories of funding, i.e. previously advantaged and disadvantaged schools. The implementation of the Norms and Standards for School Funding in 2000 saw a shift from 2 categories to 11 categories of equal size ranging from the poorest to the least poor schools. In 2001, the separate categories were dispensed with, and allocations were now formula driven for 1497 schools and each school had now become a category on its own.

The ensuing chapter looks at how the Norms and Standards for School Funding impacted upon the funding of two schools for 2000 and 2001.

Chapter 3

Understanding Norms and Standards for School Funding Indicators in Two Western Cape Education Department Schools

3.1 Introduction

The aim of the Norms and Standards for School Funding policy is to redistribute recurrent non-personnel resources to the neediest and poorest learners within a province on an equitable basis in order to redress the past inequalities in education funding. This chapter will attempt to illustrate the application of this policy with respect to whether it fulfils its aims of equity and redress by looking at two schools, situated in the Western Cape. The two schools are from different socio-economic backgrounds, one serving a previously advantaged coloured community and the other a previously disadvantaged black community. These two schools are described below. The type, nature and weighting of indicators used will be studied as well as its subsequent effect on the allocation received by the two schools and the total income for these two schools.

3.2 Socio-Economic Background of the Schools in 2001

3.2.1 School A

School A was established in 1980 under the House of Representatives serving a predominantly coloured area in Mitchells Plain. It has a learner population of 1341 with a staff of 44 educators and 6 non-CS[6] educators (1 administrative clerk and 5 support staff), of which 2 educators have been appointed and paid by the SGB. The immediate surroundings of the school are suburban in nature and characterised by dwellings constructed from brick with the basic necessary services of electricity, water supply and

[6] CS educators refers to College and School Educators. Non-CS educators normally refers to personnel who are not educators.

sewerage connections. The annual individual income for 51% of wage earners in this region is below R18000 per annum (Statistics South Africa, Census 1996)[7].

3.2.2 School B

School B was established in 1995 under the WCED, and was temporarily situated in Bellville, with its learners being bussed in from the surrounding African townships because of the overcrowding of schools in these areas. Towards the end of 1999, the school moved into a new building in Khayelitsha. It has a learner population of 1311 with a staff establishment of 37 educators and 3 non-CS[6] educators (1 administrative clerk and 2 cleaners). Shack dwellings constructed from wood and iron surround the school. Basic services are minimal and the surrounding shacks do not have individual electricity, water and sewerage connections. 45% of its learners are bussed in from even poorer areas within and surrounding Khayelitsha. These are characterised by virtually non-existent basic services and amenities. The annual individual income for 81% of wage earners in this region is below R18000 per annum (Statistics South Africa, Census 1996)[7].

It is against this background that this report will attempt to compare the variables used by the WCED in implementing Norms and Standards for School Funding at these two schools for 2000 and 2001.

3.3 Comparison of Variables used in 2000 and 2001

As described earlier (Section 2.3.2), legislation on Norms and Standards for School Funding prescribes that provincial education authorities allocate funds to schools based on the equal weighting of the socio-economic needs, i.e. poverty of the community (50%), and physical needs of schools, i.e. poverty of a school (50%). For the ease of interpretation, Table 5 is repeated below. Table 5 compares the variables used for 2000 and 2001, and its individual weighting in addressing the distribution of redress funding between schools within the Western Cape.

[7] Data was supplied directly from Statistics South Africa therefore there are no page numbers available.

***Table 5**: Comparison of Western Cape Education Department's Indicators and Weighting Used.*

Poverty of Community			Poverty of School		
Variables	**2000**	**2001**	**Variables**	**2000**	**2001**
Tertiary Education	10%	6.0%	Water Supply	10%	1.5%
White Learners	10%		Toilet Type	10%	1.5%
Cars	10%	6.5%	Electricity Supply	10%	1.5%
Farm Learners	10%	6.0%	Wall Type	10%	7.5%
Income	10%	6.5%	Learner-Classroom Ratio	10%	7.0%
Census 1996:		25%	Public Works Building Audit		6.0%
Water Supply			School Phase		7.5%
Education Level			Administrative Support		4.5%
Income			Average REQV Value of Educators		4.5%
			Av. Personnel Cost Per Learner		8.5%
Total	50%	50%	Total	50%	50%

***Source**: Western Cape Education Department (2001) "2000 Norms vs. 2001 Norms", Mimeo, Office of the Research Directorate, WCED.*

As can be seen, the 2001 variables that capture basic services differ in weighting because of the realisation that most Western Cape schools have access to basic amenities. The data sources used for the 2001 allocation include 1996 Census data, results of a building audit undertaken by the Department of Works, provisioning of staff and related costs. It was decided though that schools negatively affected by the refinement of the variables used for 2001 would receive at least 90% of their 2000 allocation. The phasing in of the use of diverse data sources was to ensure that 2001 school funding was not severely disrupted.

The section that follows compares each of the above variables at the two schools and tests to see whether it clearly distinguishes between the different socio-economic backgrounds of its learners.

3.3.1 Poverty of Community

In 2000, the WCED determined the poverty level of a community by looking at 5 equally weighted variables, i.e. tertiary education, white learners, cars, farm learners and income, to determine the poverty index of a school. This data was obtained from schools and constituted 50% of the poverty index for 2000.

In 2001, two sources of equally weighted data were used to determine the level of poverty of a community:

1. Data supplied by schools, i.e. constituting 25 % of the poverty index and
2. Census 1996 data, which constituted 25% of the poverty index.

Factors such as tertiary education, car ownership, percentage of farm learners, and income were retained, but with reduced weightings. The following section critically examines the data that were generated from the self-reporting questionnaires in schools.

3.3.1.1 Data Supplied by School

Tertiary Education

The weighting of this indicator was reduced from 10% in 2000 to 6% in 2001. The higher the percentage of parents with tertiary education, the lower the funding factor would be. Tertiary education as an indicator implies that should a learner's parents be in possession of a tertiary level of education, they would most likely be economically better off than those without. Both Schools A and B indicated that they had parents with tertiary education between the range 0-10% of the total parent population of a school which

means that this variable does not clearly distinguish between the two schools even though the income levels are vastly different according to the 1996 Census data. Given the relatively small number of parents or caregivers with tertiary education, a more useful indicator might have been levels of primary or secondary school education. Table 7 on page 31 highlights the relatively low levels of education (primary and secondary education) in both areas, although it does not significantly distinguish School A from School B. It however remains an extremely useful indication of socio-economic deprivation as both areas are characterized by low levels of formal education.

White Learners

This indicator had a 10% weighting in 2000, but was removed from the socio-economic factor in 2001.The higher the percentage of white learners as a percentage of the total learner population at the school, the lower the funding factor. Race as an indicator of economic well-being was removed as an indicator for the Norms and Standards for School Funding in 2001 due to the manner in which white schools in impoverished areas were negatively affected in 2000 and the unfair advantage of previously well resourced white schools, whose population demographics has gradually changed with the lifting of the Group Areas Act. Previously advantaged schools would once again benefit from increased funding due to a decrease in white learners as a percentage of the total learner population of that school. Regardless of race, learners attending these schools are normally from a more affluent background and would therefore benefit at the expense of the larger poorer school population within the province.

Both Schools A and B had no white learners enrolled at their schools for the period under study. The existence of no white learners and the removal of this variable for 2001 made no difference to the allocation of funding.

Cars

The weighting of this indicator was reduced from 10% in 2000 to 6.5% in 2001. The higher the percentage of parents owning motor vehicles the lower the funding factor. The ownership of cars by parents as an indicator of wealth was one of two variables that

featured strongly for both years although to a lesser extent for the year 2001. An area of concern for this study was the value of these vehicles based on year, make and model would contrast sharply between the two schools. Therefore, this variable does not distinguish clearly between the two schools.

Farm Learners

The weighting of this indicator was reduced from 10% in 2000 to 6% in 2001. The greater the percentage of farm learners, the greater the funding factor. A large percentage of schools, although small in terms of learner enrolment per school, are situated in rural areas where the infrastructure of buildings and allocation of human and physical resources are poor in comparison with schools in urban areas. This factor was used as a mechanism to redirect additional funding to rural schools where a low learner enrolment would result in a small monetary allocation. Schools A and B are situated in an urban area and indicated between 0-10% of its learner population as farm learners which means that this variable does not clearly distinguish between the two schools. This does not invalidate this indicator, but it means that other indicators would be needed to depict the socio-economic differences between these two schools.

Income

The weighting of this indicator was reduced from 10% in 2000 to 6.5% in 2001.The average income per household per annum was used as an indicator of wealth. The higher the level of income, the lower the funding factor. Both Schools A and B listed the average income per household at less than R20000 per annum, the lowest of the four allocated categories for this variable. Although both schools listed themselves in the same category, a sharp contrast of 30% is evident when looking at the category R1 – R18000 for Annual Individual Income in Table 8 on page 31, i.e. 51% for Mitchells Plain versus 81% for Khayelitsha. This contrast is further emphasised when observing the homes and living conditions of learners at a particular school with School A being the more affluent of the two schools. Therefore, this variable does not clearly distinguish between the two schools.

Summary

The response to the above five variables was based on the principal's perception of the parent and learner profile of the enrolled school community. It is evident that none of the above variables used, in the manner applied, could clearly distinguish between the schools originating from two different socio-economic groups.

The unreliability of self-reporting in the 2000 allocation process was the main reason that the WCED introduced Census 1996 in the 2001 process. In order to facilitate the stability of 2000 allocations, Census 1996 would constitute only half of the weight of the socio-economic factor in 2001. This gradual phasing-in is eventually meant to replace self-reporting as a valid data source. What follows in the next section is an examination of the 2001 indicators drawn from Census 1996 data.

3.3.1.2 External Data Source

Census 1996

In refining the Norms and Standards for School Funding formula for 2001, an external data reference source, was used in the form of Census 1996 data weighted at 25% to the information supplied from schools (25% compared to 50% of the previous year), with particular reference being made to income, water supply and education level of the immediate area surrounding the school. The availability and type of these basic services determine the funding allocations to schools.

Water Supply

Access to water, and especially clean water is an indicator that is used in world-wide surveys that measure poverty, and communities' access to basic services. Most poor communities do not have access to such basic services as clean water. The occurrence of certain basic amenities, such as water supply, can be used to indicate the level of wealth of that region. The higher the occurrence of these basic amenities, the wealthier the community in terms of infrastructure, the lower the funding factor. The table below refers to the various categories of water supply found in these two regions.

***Table 6**: Water Supply in Mitchells Plain and Khayelitsha, 1996.*

Water Supply	Mitchells Plain	Khayelitsha
Piped Water in Dwelling	97%	24%
Piped Water on Site	1%	49%
Public Tap	1%	18%
Other	1%	9%
Total	100%	100%

***Source**: Statistics South Africa, Census 1996*[7].

It is evident that the Khayelitsha region, in which School B is situated, is poorly resourced in terms of piped water supply to individual dwellings. This variable clearly distinguishes between the two schools.

Education Level

Economic studies consistently emphasised that an increase in education level is associated with an increase in income. Education as an indicator implies that should an inhabitant of a region be in possession of some level of qualification, it could be used as an indicator of wealth. The higher the level of education, the lower the funding factor. The table below looks at the highest level of education for the inhabitants of these two regions.

***Table** 7: Highest Education Level in Mitchells Plain and Khayelitsha, 1996.*

Highest Level of Education	Mitchells Plain	Khayelitsha
No Schooling	8%	13%
Primary	31%	30%
Some Secondary (No Matric)	38%	34%
Matric Only	8%	8%
Matric +	1%	1%
Unspecified	14%	14%
Total	100%	100%

***Source**: Statistics South Africa, Census 1996*[7].

The levels of education between these two regions are fairly equal which means that the use of this variable does not clearly distinguish between the two schools.

Income

The levels of income for a particular region can give an indication of the economic well-being of its inhabitants. The higher the annual individual income of a region, the lower the funding factor. The table below lists the categories of annual individual income for the two regions.

***Table 8**: Annual Individual Income in Mitchells Plain and Khayelitsha, 1996.*

Annual Individual Income	Mitchells Plain	Khayelitsha
None	1%	1 %
R1 – R18 000	51%	81%
R 18 001 – R 30 000	26%	11%
R 30 000 +	15%	6%
Unspecified	7%	1%
Total	100%	100%

***Source**: Statistics South Africa, Census 1996*[7].

Individual income for the category R1 – R18000 shows a distinct contrast between the two regions with Khayelitsha having 81% of its wage earners falling in this category compared to only 51% for Mitchells Plain. In further support of the argument that Khayelitsha is even more economically depressed than Mitchells Plain, the following table clearly shows that unemployment is a bigger scourge in Khayelitsha than Mitchells Plain.

***Table 9**: Unemployment Rate in Mitchells Plain and Khayelitsha, 1996.*

Levels of Unemployment	Mitchells Plain	Khayelitsha
Unemployed, looking for work	19%	40 %

***Source**: Statistics South Africa, Census 1996*[7].

Annual individual income therefore clearly distinguishes between the two regions within which the schools are situated.

The use of the above three variables from the Census 1996 data clearly distinguishes between the two regions within which these two schools find themselves, particularly with regard to the type of water supply and annual individual income, and to a lesser extent on the highest level of education. When comparing the two sources of data, i.e. data supplied by the school and external data in the form of Census 1996, it is evident that the Census 1996 data would more accurately distinguish between the levels of poverty of the community of these two schools.

The socio-economic factor described in the section above constitutes 50% of the poverty index used by the WCED. The other half of the poverty index refers to the "physical conditions at school" factor, and the following section examines both its use and interpretation in the 2000 and 2001 allocation process.

3.3.2 Poverty of School

In 2001, three different categories of data could be noted, i.e. physical conditions at school, staffing and phase of schools. All the variables of 2000, which related to the physical conditions at school have been retained but with reduced weightings (50% to 28%) with the added variables relating to staffing (17.5%) and school phase (7.5%) being introduced to give a total weighting of 50% for 2001.

3.3.2.1 Physical Conditions at School

The variables listed below and ranking within each sub-section, e.g. toilets with flush system to sewers, flush system to septic tank, chemical, pit latrine or bucket system at the lower end of the category; were used as indicators, advantaging schools which lacked these basic amenities in particular rural schools. The higher the ranking of these amenities, the lower the funding factor.

Water Supply

The weighting of this indicator was reduced from 10% in 2000 to 1.5% in 2001. Both School A and B had a piped in-door water supply on site, which means that this variable does not clearly distinguish between the two schools.

Toilet Type

The weighting of this indicator was reduced from 10% in 2000 to 1.5% in 2001. Both Schools A and B had toilets that flushed to sewers on site which means that this variable does not clearly distinguish between the two schools.

Electricity Supply

The weighting of this indicator was reduced from 10% in 2000 to 1.5% in 2001. Both Schools A and B were wired and supplied with electricity which means that this variable does not clearly distinguish between the two schools.

The three factors above have been drastically reduced because it was established that most schools in the Western Cape have access to these basic services. It was important though, to retain indicators that show access to basic services, because many rural schools in the Western Cape still do not have these services.

Wall Type

The weighting of this indicator was reduced from 10% in 2000 to 7.5% in 2001. School A's external walls are pre-cast cement slabs whereas School B's external walls are constructed from brick. A clear distinction exists for this variable between the two schools in favour though of School A in the more advantaged area. The type of construction for schools varies considerably from prefabricated wall types to solid brick walls. Generally, it is more expensive to maintain prefabricated walls because of exposure to weather conditions, vandalism and general wear and tear.

Learner-Classroom Ratio

The weighting of this indicator was reduced from 10% in 2000 to 7% in 2001. The availability of classrooms used for teaching was used as an indicator of available physical resources to accommodate learners and its resultant effects in terms of overcrowding. Overcrowding would indicate a lack of physical resources, thereby requiring additional funding. The learner-classroom ratio as a variable was reduced from 10% in 2000 to 7.5% in 2001. The higher the ratio (indication of overcrowding), the greater the funding factor. The table below reflects the number of available classrooms at the two schools.

***Table 10**: Learner-Classroom Ratios for School A (Mitchells Plain) and School B (Khayelitsha), 2000 School Year.*

School	A	B
Number of Learners (2000 Academic Year)	1352	1214
Classrooms	30	20
Specialist Rooms	13	13
Total Available Rooms	43	33
Learner-Classroom Ratio	31	37

***Source**: Western Cape Education Department School Survey, 2000.*

Although School A has a larger learner population and a greater number of available classrooms, their resultant learner-classroom ratio would be lower than School B, hence School A's funding factor would be lower than School B. This variable therefore clearly distinguishes between the two schools.

Public Works Building Audit

The results of a building audit undertaken by the Department of Works were used to determine the overall condition of schools' buildings and was introduced into the 2001 funding formula and accounted for 6% of the total funding for 2001. Schools in need of repairs or improvement would therefore receive a greater funding factor. School A is in operation in the same building for approximately 21 years, which would therefore imply that maintenance costs and need of repair would be high. School B is only 18 months old and has won an award for the best designed school in 1999. Therefore, this variable relating to the physical condition ranking of the school would not necessarily correspond to poverty ranking of the community, because the majority of new schools have been built in previously disadvantaged and impoverished communities (WCED, 2000b:3). This variable therefore clearly distinguishes between the two schools.

3.3.2.2 School Phase

This indicator was introduced in 2001 and accounts for 7.5% of the poverty of the school factor. The WCED services approximately 879 000 learners in 1497 public ordinary schools which equates to 1167 primary and 330 secondary schools with an average of 493 learners in primary schools and 920 in secondary schools (WCED, 2001). In terms of this funding formula, a primary school learner would receive on average 30% more than a secondary school learner. The variable, school phase, was used as a balancing factor to bring per learner funding on par between primary and secondary schools. Had there been a surplus education budget, which addressed all the basic needs of its schools, this factor could be removed to fall in line with international trends in developing countries where greater rates of returns can be achieved by redirecting funds towards primary schooling (Adams, 1989:52). Secondary schools would therefore receive a greater funding factor than primary schools. Both Schools A and B are classified as secondary schools which means that this variable does not distinguish between the two schools.

3.3.2.3 Staffing

Administrative Support

This indicator was introduced in 2001 and accounts for 4.5% of the poverty of the school factor. Non-CS educator (CS educators refers to College and School Educators. Non-CS educators normally refers to personnel who are not educators) numbers at schools could be used as an indicator to identify schools previously advantaged in terms of this staffing variable. Schools with higher levels of administration and support staff would therefore receive lower levels of funding. The table below highlights the number of non-CS educators.

***Table 11**: Non-CS Educators for School A (Mitchells Plain) and School B (Khayelitsha), 2001 School Year.*

School	A	B
Administration Staff	1	1
Support Staff	5	2
Total	6	3

***Source**: Western Cape Education Department Snap Survey 2001.*

School B will have a higher funding factor as it operates with 50% less non-CS educators than School A. This variable clearly distinguishes between the two schools. The current redeployment process of non-CS educators in excess to schools which operate below the agreed upon staffing norms could in the future, affect the level and use of this variable.

Average REQV Values of Educators

This indicator was introduced in 2001 and accounts for 8.5% of the poverty of the school factor. REQV refers to the qualification level of educators in public and independent schools. The basic unit of calculating a REQV is the highest schooling standard passed plus number of years trained professionally as an educator. The Relative Equivalent Qualification Value (REQV) of educators at a particular school proxies for the supposed quality of teaching resources available. The department has an obligation to ensure that quality educator resources are equitably spread, and in the absence of a re-deployment mechanism, Norms and Standards for School Funding targets schools where the REQV levels of educators are low, particularly in primary and or rural schools. This indicator has been introduced to acknowledge the human resource discrepancies between well-resourced urban secondary schools and rural primary schools. The higher the REQV values, the higher the level of qualification of educators and the greater the salary costs. Educators in primary, rural and/or previously disadvantaged schools have on average lower REQV values than their secondary, urbanised and/or previously advantaged counterparts. In terms of equity and redress this would mean that more funding is being spent on educating a learner from a previously advantaged, urbanised and/or secondary school at the expense of poor and rural learners. The higher the average REQV value of

educators at a school, the lower the funding factor. The table below highlights the average REQV values of educators at the two schools.

***Table 12**: Average REQV Values of Educators for School A (Mitchells Plain) and School B (Khayelitsha), 2000 School Year.*

School	A	B
Average REQV Value	15	14

***Source**: Western Cape Education Department Snap Survey 2000.*

Although both schools are secondary urban schools, School A has a slightly higher average REQV for its educators than School B, but the difference is negligible in terms of the funding formula, i.e. $^{1}/_{15}$ x 4.5% = 0.3%. This variable therefore does not clearly distinguish between the two schools.

Personnel Cost per Learner

This indicator was introduced in 2001 and accounts for 8.5% of the poverty of the school factor. Schools with a high personnel cost per learner would receive a lower funding factor. The total salaried expenditure for educators, administration staff and support staff at a school would inevitably influence the cost of educating a learner at that particular school. Schools with higher staff establishment figures, particularly in urban and/or previously advantaged schools would have an unfair advantage over rural and/or previously disadvantaged schools as the personnel cost per learner would be higher, therefore more funds are being spent educating a learner at these schools. The table below reflects the average cost per learner for the month of November 2000 at the two schools.

***Table 13**: Average Personnel Cost per Learner for School A (Mitchells Plain) and School B (Khayelitsha), November 2000.*

School	A	B
Total Gross Salary Expenditure (Rands)	323230.62	279398.77
Number of Learners (2000 Academic Year)	1352	1214
Average Personnel Cost per Learner (Rands)	239.08	230.15

***Source**: Western Cape Education Department, November 2000 Salary Advices.*

More funding is therefore spent on educating a learner at School A than School B, which would result in School B receiving a higher funding factor. This variable to a lesser extent distinguishes between the two schools. The REQV factor is strongly related to the pedagogic quality of educators, whereas personnel costs deal with the entire wage bill of the school, including support and administration staff.

Whilst looking at the variables related to poverty of a school, toilet type, water and electricity supply were variables that did not clearly distinguish between the two schools. This was possibly due to the fact that most schools in the province have these basic services.

3.4 Conclusion

It is evident that the data requested from schools by the provincial education department in the form of provincial surveys, i.e. tertiary education, white learners, cars, farm learners, income, water and electricity supply, and toilet type does not clearly distinguish between the two schools when used as variables. Although both schools, to a different degree, had been disadvantaged in the past, these variables would not be able to distinguish well between a poor group of schools within a region and would possible result in schools being classified as equally poor. The information requested was based on the opinion of principals and raises questions about the problem of self-reporting and portraying conditions worse than what they are, this could possibly increase a school's

allocation. This casts doubt on the validity of these variables in distinguishing between socio-economic groups.

External sources of data such as the use of Census 1996, learner enrolment, staffing and its related costs distinguish more clearly between the two schools. The use of Census 1996 data, despite its limitations, provides more reliable data in distinguishing between the two schools when compared to the surveys administered by the provincial department. This was clearly evident when reporting on income where School A listed the average household income to be below R20000 per annum compared to the Census 1996 data which listed that only 51% of individuals in that region earned less than R18000 per annum. Personal observations by its personnel are often subjective and open to many errors; this raises serious questions on its validity and reliability.

Table 14 below summarises and compares the effect of the WCED's indicators on School A and B in terms of whether it negatively (-), had no effect (0) or positively (+) affected a school with respect to the other in terms of funding allocation.

***Table 14**: Comparison of the Effects of the Western Cape Education Department's Indicators on School A and B.*

Poverty of Community (50%)			**Poverty of School (50%)**		
Variables	**School A**	**School B**	**Variables**	**School A**	**School B**
Tertiary Education	0	0	Water Supply	0	0
White Learners	0	0	Toilet Type	0	0
Cars	0	0	Electricity Supply	0	0
Farm Learners	0	0	Wall Type	+	-
Income	0	0	Learner-Classroom Ratio	-	+
Census 1996:			Public Works Building Audit	+	-
Water Supply	-	+	School Phase	0	0
Education Level	0	0	Administrative Support	-	+
Income	-	+	Average REQV Value of Educators	-	+
			Average Personnel Cost Per Learner	-	+

***Table Key**: Negative Effect = - , No Effect = 0 , Positive Effect = +.*

From this table it appears as if School B is largely advantaged relative to School A, both in terms of the poverty of the community and poverty of the school factors. However, the weightings of the factors meant in practice that, as discussed in the next section, the net effect was an improvement of School A relative to School B.

The variables as listed above were thereafter used by the WCED to determine a poverty index for the school. This poverty index was then used to determine the amount of money allocated per learner that each school would receive in the Western Cape. Schools traditionally have two main sources of income, viz. provincial funding and the supplementary raising of contributions from parents and the community in the form of schools fees and fundraising initiatives.

The following section looks at provincial funding received annually by these two schools for the period 1998 to 2001, while Section 3.6 examines supplementary funding.

3.5 Annual Financial Allocations for Individual Schools

Each year prior to the start of the next academic year, a school receives an annual allocation, which it uses to purchase textbooks, teaching aids, stationery and supplies. The introduction of the Norms and Standards for School Funding for 2000 and 2001 saw the introduction of 2 additional allocations, i.e. for the maintenance of buildings and payment of municipal services.

Although the Norms and Standards for School Funding was only targeted to be implemented in 2000, the WCED started phasing in some of the aspects of this policy long before it was gazetted so as to prepare schooling communities in advance (Singh, 1998: 18). The phasing in of the policy was introduced in 1999. It therefore becomes crucial to understand the funding arrangements prior to this initial introduction of the Norms and Standards for School Funding. Central to the research question is the need to examine how equity has been effected after the introduction of the policy in 2000 and 2001. This explains why it was necessary to look at the period preceding the phased implementation (1998) as well as the period subsequent to the introduction of the norms and Standards (2001).

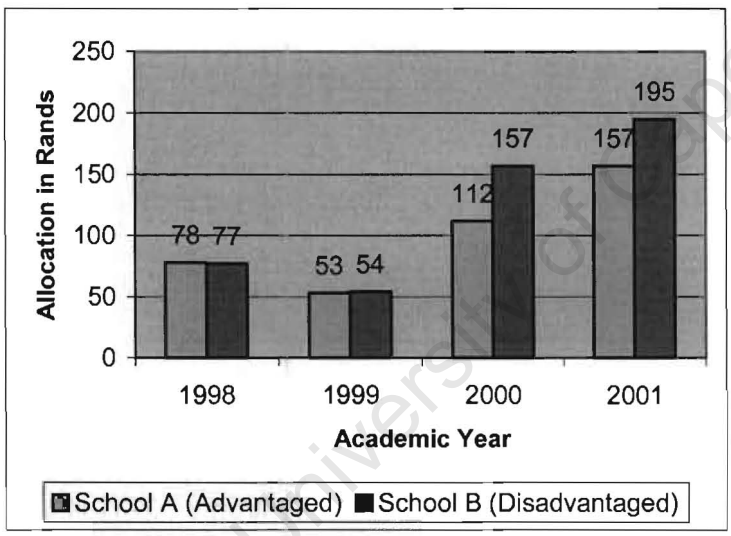
Table 15 and Graph 1 illustrate the allocations received by the two schools for the past four years and the resultant allocation per learner.

***Table 15**: Monetary allocations to School A and School B, 1998-2001.*

	1998 (Fixed Grants)		1999 (Fixed Grants)		2000 (Block Fixed Graded Grants)		2001 (Formula Driven Funding)	
School	A	B	A	B	A	B	A	B
Number of Learners (10th School Day of Preceding Year)	1270	2212	1318	2188	1322	1200[8]	1352	1214
Total Allocation (Rands)	99336	169292	70212	119341	148064	188400	212264	236730
Allocation per Learner (Rands)	78	77	53	54	112	157	157	195
Percentage difference per Learner	1		2		29		19	

***Source**: Western Cape Education Department.*

***Graph 1**: Monetary allocations to School A and School B, 1998-2001.*



***Source**: Western Cape Education Department.*

The above table and graph clearly show that funding received by both schools was almost equal over the period 1998 to 1999, prior to the implementation of the Norms and Standards for School Funding despite the variations in the socio-economic conditions at the two schools. The sections that follow looks at the three different categories of funding

[8] The reduction in the number of learners in comparison to the previous year was due the division of School B into two schools towards the end of 1999.

as discussed in the previous chapter in terms of the monetary allocations received by schools from the WCED.

Fixed Grants Funding Period: 1998 – 1999

No significant difference in per learner allocation could be observed for 1998 and 1999 because the redress component treated both schools as if they were equally disadvantaged by allocating R5 per learner at each school (Van Zyl, 1998a:8). This difference in favour of School A arose as a result of School A having more instructional rooms than School B together with School B's larger learner enrolment in the lower grades, i.e. Grades 8-9.

Block Fixed Graded Grants Funding Period 2000

Distinct contrasts are evident in the socio-economic conditions of the school and community, and one expects Norms and Standards for School Funding to reflect these differences. This means that School B should receive more funding in terms of equity and redress than School A. This was evident in that School B received 29% more funding than School A for this period as School A was placed in Group F (R112 per learner) compared to School B (R157 per learner) which was placed in Group C.

Formula Driven Grants Funding Period 2001

The refining of the WCED's indicators and weighting in 2001 further enhanced the Norms and Standards for School Funding. This refinement of the index was brought about by the introduction of objective external variables, such as Census 1996 data, which was more accurate in describing socio-economic conditions within these two communities. In addition objective indicators measuring the physical poverty at school, such as average REQV values of educators, further enhanced the ability of the index to more accurately measure poverty of conditions prevailing at schools were also used.

In practice, both School A and B received more funds than the previous year. School A's allocation increased from R112 (Group F) to R157 (equivalent to Group C when compared to groups used in 2000) whereas School B's allocation increased from R157 (Group C) to R195 (virtually equivalent to Group A when compared to groups used in

2000). As a result of the increase in provincial allocations, both schools financial position reflected an absolute increase. However, the percentage increase in provincial funding for School A is relatively larger than the corresponding increase for School B, i.e. 40% for School A versus 24% for School B. This outcome, in favour of School A was not expected (Section 3.4), but is explicable in terms of the following two factors:

1. The equally powerful weighting of the physical condition at school and poverty of the surrounding community factors:

   Many new schools were built in previously disadvantaged communities long before the introduction of the Norms and Standards for School Funding. This therefore meant that many of the disadvantaged schools with new buildings would get an unfavourable rating on the quality of school buildings in terms of the funding formula. This stands in sharp contrast to the pro-poor rating these same schools would receive when the socio-economic dimension of the index is measured. Thus the combined scores on the socio-economic factor and the infra-structure factor worked against each other, thereby restricting the level of redress funding to disadvantaged schools which occupied newly constructed buildings.

2. In the overall index, the income indicators do not constitute more than 25% of the total weighting:

   An opportunity to effectively capture income differentials between these two schools has been weakened and this further explains why the index failed to clearly distinguish between these two schools. Added to this, the high levels of unemployment, e.g. 40% in Khayelitsha (School B) versus 19% in Mitchells Plain (School A) further lowers School B's community's capacity of collecting and increasing school fees and/or raising funds. Put differently, the overall community resources – employment and income with

the current ratings and their impact on the resources the school has access to, are not captured.

The rationale of any good index is that it should capture changes in the socio-economic conditions of learners and the parent community. Subsequent implementation of the Norms and Standards for School Funding will give us an indication whether the indicators continue to distinguish socio-economic need in these two communities.

The section that follows looks at additional sources of revenue that schools have to rely on to supplement the annual provincial allocations made to schools.

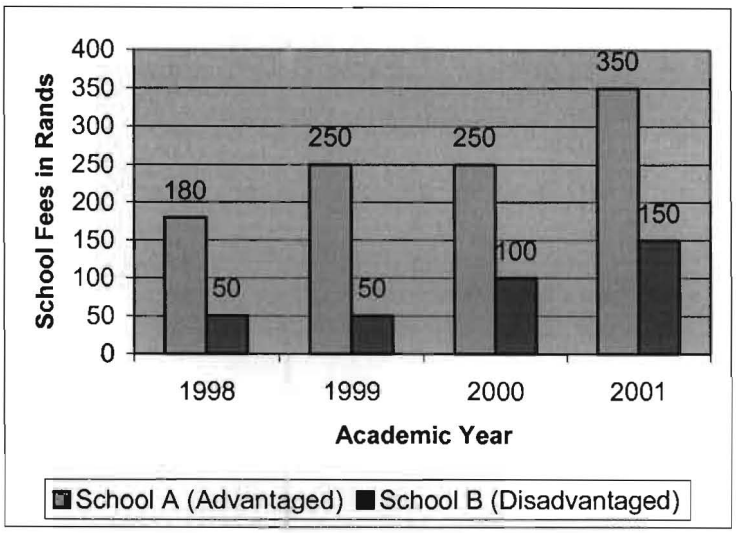
3.6 Supplementing the Annual Allocation

The contrasts in the socio-economic conditions between the two schools are further exacerbated when looking at ways the two schools go about supplementing the annual monetary allocation. There are two main sources of income, other than the monetary allocation, i.e. the charging of school fees and fundraising. The ensuing two subsections looks at these additional sources of income.

3.6.1 School Fees

The graph below highlights the disparities in fees charged per learner between the two schools for the period 1998 to 2000.

***Graph 2**: User fees charged at School A and B.*



***Source**: School A and B.*

The different socio-economic backgrounds of the two schools are evident in the contrasting levels of school fees charged. School A charged an average of 3.4 times more school fees than School B for the period 1998 to 2000. A reduction of 30% in the Provincial monetary allocation per learner for 1999 at School A automatically resulted in a similar increase in school fees for that academic year. School A's fees remained constant for 2000 due to the doubling in the province's funding allocation per learner for 2000. Although it was argued earlier that the 2000 allocation process did not distinguish clearly enough between poor schools, it is also true that the per learner allocation for School A actually increased considerably from R53 in 1999 to R112 in 2000. It is interesting to note that in spite of increased provincial support to both schools in 2000 and 2001, both schools opted to increase their school fees.

Increased internal budgetary expenditure demands have forced both schools to increase their school fees over the four-year period. Nonetheless, a wide margin exists between the actual amounts charged at the two schools, lending greater support to the differential funding amounts allocated via the Norms and Standards for School Funding. However, the levels of school fees charged is not always the best indicator of socio-economic need, especially for schools that fall between extremely poor and rich schools. Most schools

that fall between these extremes hide parents who are able to pay, but do not contribute, as well as parents who cannot afford to pay, but actually pay. This is evident when analyzing the percentage of school fees recovered for the 2000 academic year for the two schools. Table 16 below reflects the average amount of school fees recovered from each learner in 2000.

***Table 16**: Average School Fees Collected.*

	School A	**School B**
School Fees per Learner (Rands)	250	100
Average School Fees Recovered per Learner (Rands)	228	98
Percentage Recovered	91%	98%

***Source**: Financial Statements of School A and B, 2000.*

The inclusion of school fees as an indicator may therefore lead as an incentive not to collect or promote the charging of school fees. This defeats the purpose of SASA and the Norms and Standards for School Funding, which emphasises the importance of both provincial funding and private contributions from the parent community.

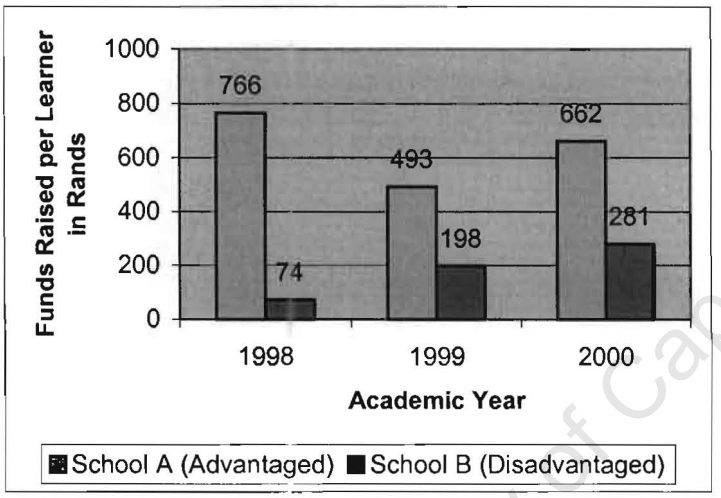
The school's ability to raise other sources of revenue also needs to be taken into account as school fees and provincial funding are not sufficient to fund schools adequately.

3.6.2 Fundraising

In order to further supplement the school's coffers other than the annual allocation and the charging of school fees, alternative measures of raising funds for schools have to be undertaken. The ability to raise additional funds varies between the two schools. School A relies heavily on its fundraising abilities by organising a number of social events throughout the year ranging from casual days, discos, outings and carnivals, whereas School B relies more on its ability to raise funds by canvassing for donations and a limited number of low profit generating fundraising activities. This refers mostly to variety concerts, casual days where learners pay to dress up casually, instead of wearing

their normal uniform. It is important to understand that these efforts do not realise large profits. The socio-economic background of School B does not make it possible to raise funds on a large scale through fundraising activities due to the high unemployment levels and limited disposable income of the surrounding community. The graph below illustrates the raising of funds other than that of school fees for the two schools. The data for 2001 is not included as it is as yet unaudited.

***Graph 3**: Total Funds Raised per Learner, 1998-2000.*

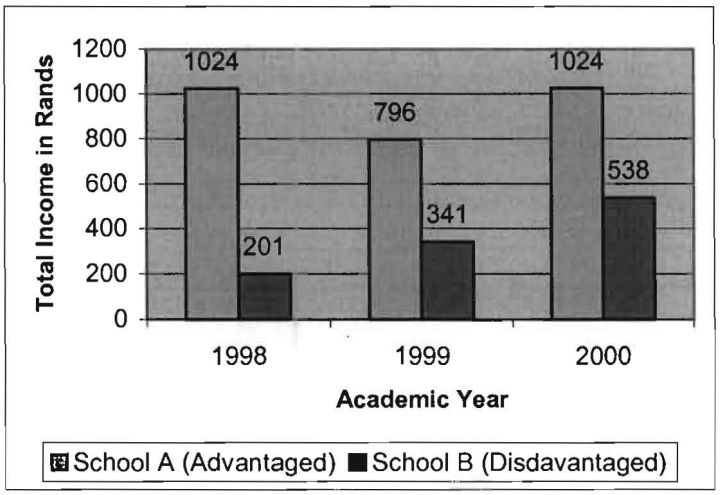


***Source**: Financial Statements of School A and School B.*

School A's ability to raise funds is being placed under increasing pressure due to the economic downtrend over the last 3 years. School B has managed to gradually increase its fundraising drives, but on a somewhat smaller scale for the period 1998 to 2000. On average School A manages to raise 3 times more funding per learner than School B.

The cumulative effect of the provincial monetary allocation, school fees and fundraising as reflected in Graph 4 further highlights the socio-economic differences and weaknesses of the Norms and Standards for School Funding when looking at the two schools.

***Graph 4**: Total Income per Learner, including provincial funding, actual school fees collected and fundraising monies, 1998-2000.*



***Source**: Financial Statements and Provincial Funding of School A and School B.*

In 1998-1999, the combining of the annual allocation, school fees and the raising of funds in the above graph reflects that School A raised on average more than 3 times more money per learner than School B. With the implementation of the Norms and Standards for School Funding (2000) this gap declined to twice as much in 2000. However, this reduction was not due to the Norms and Standards for School Funding (the 1999 – 2000 gap was R45 in favour of School B). The main reason for this decline was the reduced ability of School A to fundraise.

These added factors, i.e. the charging of user fees and ability to raise funds, need to be taken into account when choosing variables that would assist in addressing the past imbalances in education spending and the gap amplified by socio-economic differences of the two schools. If the Norms and Standards for School Funding as a policy wishes to fulfill its aims of equity and redress in terms of school funding, the ability to raise school fees and additional funding needs to be factored into the formula. Alternatively an indicator needs to be found that captures the ability of parents and communities to raise supplementary funds.

3.7 Conclusion

The patterns emerging from this study indicate that the current variables and their weightings do not clearly distinguish between the two schools sufficiently. The reasons for this being are:

- The relative weak weighting of the income indicators that otherwise clearly have the ability to strengthen differentiation between schools.
- The cancellation of the potential effect of income indicators by the relatively good conditions of new school buildings in disadvantaged communities.
- The omission of unemployment levels in communities, which affects the overall fee and fundraising capacities of schools.

It is evident that the financing of education for a child up to a certain level will vary for reasons that are outside the control of department officials (Porteus, 2001:7). Porteus is referring to research done by the FFC that suggests that the funding of education must take into account factors beyond the immediate control of an education department. Such factors refer to the number of learners in a province, the distribution of poor learners and the distribution of disabled learners. Extra resources required to educate these children would therefore have to be directed to schools which operate in environments and under conditions where educating children are more difficult (Finance and Fiscal Commission [FFC], 2000:28).

The introduction of a poverty-targeted instrument like the Norms and Standards for School Funding ideally assumes large differences between rich and poor learners. This logic is complicated when the Norms and Standards for School Funding policy is implemented in situations where the majority of learners are poor. In many instances this means that the definition of the poorest of the poor excluded many poor learners whose parents are also income-poor in order to satisfy a bureaucratic process of dividing learners into different poverty categories (Wildeman, 2001a:2).

The implementation of the Norms and Standards for School Funding policy by the WCED misjudged the true economic and social indicators (Gardiner, 1999:9). It is therefore suggested that the variables be further fine-tuned and/or the Norms and Standards for School Funding be expanded or reviewed because learners in the lower socio-economic brackets still tend to receive less funding per learner when provincial allocations, school fees and fundraising revenues are taken into account.

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