

Chapter 1

INTRODUCTION

1.1 Background

Since 1994 South Africa has undertaken the major task of transforming the inequitable political, economic and social system that characterised the apartheid era into a democratic society which aims to equalise opportunities for all its citizens. Central to this transformation is the establishment of a quality, equitable and democratic education system.

A key concept framing the transformation of the post-apartheid education system – as laid out in the South African Schools Act (RSA, 1996b) – is equity. The concept is important in its own right, as well as being a means towards creating an environment conducive to teaching and learning. Although equity as a concept has been explored in the context of education reform, its meaning, implications and relationship to concepts such as quality and redress are contested. Seen against the background of the apartheid system, the new commitment to equity in post-apartheid legislation was as much a firm rejection of the past as a unifying social concept for the future.

Clarity on the concepts of equity and equality is essential, and the debates on them are vast. For the purpose of this thesis equality has to do with sameness or, in public policy, non-discrimination (Secada, 1989). The concept of equity follows on the work of Rawls (1972, 2001), Walzer (1983) and Sayed (2001b); it refers to what is socially just and attempts to address unequal outcomes. Equity, then, can

define the specificity of inequality (Weber, 2002), and can advocate a process of differential distribution to achieve its goals. These are the definitions of equity and inequality used in this thesis.

After the second national democratic elections in 1999, it became apparent that policy makers continue to struggle to address the equalisation of access to resources at the school level. Concern about equity and equality has taken on an increased urgency in an era marked by much more discussion on redress, in particular whether the gap between rich and poor schools in the public schooling system is closing, staying the same or is in fact increasing. Recent research has emphasised the importance of distributional equity and has argued that significant progress has been made towards a fairer distribution of public funds across provinces (Fiske & Ladd, 2002:23). Yet even with improved spending equity across provinces, substantial differences remain in terms of provincial finance resource bases, learner:educator ratios (LERs), and educator profiles within a province's schools. There is limited research on these intra-provincial disparities (Fleisch, 2001; Porteus *et al.*, 2001; Van der Bergh, 2002, 2004; Fiske & Ladd, 2004), and little is known about the impact of equity indicators and their correlates. In particular, our understanding about the impact and relationship of per capita expenditure – a key equity indicator – to other school-level variables is limited. A better understanding of how schools differ in relation to overall finance equity patterns, and the specific correlates and variables driving these differences, is useful for designing effective policies that address equity.

Equity reforms in post-apartheid South Africa in the mid 1990s intended to equalise funding among provinces, schools and socio-economic groups. This was to be done through national policy that would guide school funding. The most significant legislation was the South African Schools Act (RSA, 1996b), the National Education Policy Act (RSA, 1998b), and the Employment of Educators Act (RSA, 1998a). In broad terms, equity was to be achieved through the redistribution of human, physical and resource inputs. In practice, this translated mainly into financial resource reallocation and educator redistribution. A less obvious but nonetheless important consequence of this policy has been the redistribution of learners across the public schooling system, through parents

exercising choice in their quest for a better education for their children.

1.2 Problem Statement

The main aim of the research is to investigate whether or to what degree these intentions and actions resulted in a significant equalisation of access and redistribution of educational resources, and to focus on patterns of intra-provincial equity. Key questions continue to be asked about the overall education transformation project and its relation to funding equity: Is school financing still stratified on the basis of historical privilege? Has state funding worked to reduce inequality of inputs? Have funding policies worked to reduce inequality? How has the presence of private funding in the public schooling system impacted on funding equity policies? Intense debate continues about whether education is in fact equal, which inputs are the most significant, whether equity includes the notion of adequacy and, more recently, whether the function of funding equity is to equalise access to resources or to improve outcomes. Much of the analysis of inequality thus far (Motala, 2000, 2001a, 2001b; Fedderke, De Kadt & Luis, 2000; Perry, 2000; Fiske & Ladd, 2004; Gustaffson & Patel, 2006; Reshovsky, 2005) has focused on inequality across former departments and provinces. However, South African research, which mainly provides a macro and aggregated perspective, has not addressed the complexities of inequality or the new forms of inequality in post-apartheid South Africa. Moreover, while South Africa has derived a particular form of resource allocation model (Mingat & Tan, 1988; Monk, 1990; Ross & Levacic, 1999; Levin & McEwan, 2001), there is limited understanding of the impact of this input-driven approach.

This thesis aims to explicate the patterns and typology of inequality in post-apartheid South Africa, and to deepen our understanding of the construct of equity. It also aims to reach an understanding of the application of equity in the context of public schooling through school-level analysis of a key equity indicator, per capita expenditure. It clarifies the components and the impact of the inputs by which per capita expenditure is derived. This approach quantifies inequity and progress towards equality, and establishes a broader set of variables and

correlates with which to comprehend school finance equity. It also makes a contribution to understanding the financial impact of private contributions on formal basic schooling. The specific methodological approach contributes new primary data on school finance equity.

The thesis undertakes a detailed exposition and critical review of patterns of school funding practice in one province. The methodology utilised is mainly quantitative and empirical. Specific statistical research techniques are used, both of a descriptive and an inferential nature. Regression analysis techniques are used, with learner funding as a dependent variable in relation to various independent variables. Using Gauteng as the case study, the study investigates variation across schools within the province in relation to the achievement of key equity goals. A broad set of variables has been utilised.

The study also attempts to explain intra-provincial disparities by looking at per capita expenditure and its relationship to other equity indicators – learner:educator ratios and educator qualifications. Unlike previous studies of provincial equity, this study focuses on the distribution of per capita expenditure *per school* and not solely on the average characteristics of different school types. These indicators are also linked to social factors such as socio-economic status (SES) and race. Poverty quintiles are used as a proxy for SES and former department as a proxy for race. Data has been drawn from Gauteng administrative records, which include various data sets – Financial Management Systems and PERSAL (for educator data), the Education Management Information System (EMIS) for the Annual School Survey (Gauteng) and the School Funding Norms database. The breadth of the data allows analytical flexibility not possible with aggregated data sets. The data is rich because it shifts from using race as a primary social organiser, includes information on private contributions, and uses new data on poverty and socio-economic status from the School Funding Norms database.

The study is unique because it uses data that is disaggregated to the school level in order to establish real per capita expenditure for each of the approximately 1 900 schools in Gauteng in 1999 and 2002. This is particularly significant

because this data of actual school-level expenditure as an outcome of merging different databases did not previously exist, nor did an understanding of the role of private income in differentiating public schooling, particularly on the basis of fees. For the first time, the actual expenditure for each school in Gauteng is established, allowing an assessment of the variability of financing in public schooling.

1.3 Significance of the Study

In undertaking this research, detailed descriptive data is presented on specific inputs to public education in Gauteng, in the context of South African budget reform. The primary justification for the study is given below:

- It contributes to the quantification of finance equity and inequity through a better understanding of finance input data.
- A number of significant studies analysing input data from the South African education system have used racial classification as the primary organiser (Malherbe, 1977; Case & Deaton, 1999; Fedderke *et al.*, 2000). This reflects both the primacy of race as a social organiser under apartheid and the subsequent availability of racially organised statistics. This study goes beyond a race-based analysis to evaluate system inputs by utilising a much broader range of variables – poverty quintiles and socio-economic status, district variation, school type (primary, secondary), former department (as a proxy for race), school size, and educator qualifications and experience. Thus, the study will establish the patterns and typography of inequality at a school level, as well as the primacy of particular indicators.
- The standard approach when calculating input into the public education system is to focus on state expenditure. Private contributions in the form of school fees and fundraising activities are typically excluded from consideration. While this study does not include indirect education costs – such as uniforms, transport and text books – it does evaluate school income

as a function of both state and private contributions. The data will contribute to a better understanding of the implications of the public/private model for basic school financing in South Africa.

- In the past there have been serious limitations regarding the availability, reliability and consistency of data across the education sector. The recording of data was very disjointed due to the fragmentation of political administration, the lack of data-driven policy decisions, and the fragmentation of data by race. The pre-1994 data – which includes data from government, parastatals and independent research agencies – was characterised by inconsistent series, frequent shifts in classification schemes, and little definition of data terms (Fedderke *et al.*, 2000:261). There is a complete break in continuity of data from 1994 when the fragmented apartheid system was rationalised into one national system. Given the massive reconfiguration of information systems, data for the first few years after 1994 must be regarded with some circumspection. Since the data presented in this study is from the post-1998 period, when the education management information systems at both provincial and national levels were more established, it is more reliable.
- This study is concerned with the application of finance equity in one province. Although the South African education research tradition is rich in policy review (De Clerq, 1998; Jansen, 2001; Sayed, 2001b; Kallaway, 2002; Chisholm, Motala & Vally, 2003; Chisholm, 2004), the dominant methodology usually involves documentary analysis, historical review and small-scale empirical study. While significant data analysis has been undertaken (Crouch, 1998, 1999, 2005; Fedderke *et al.*, 2000; Crouch & Vinjevold, 2001; Fiske & Ladd, 2002, 2004), it is limited. Moreover, while the significance of linking inputs to outcomes cannot be underestimated (Motala & Perry, 1998, 2000; Crouch, 1999; Crouch & Vinjevold, 2001; Van der Berg & Burger, 2003), very little is known about equity of inputs into the South African schooling system. There is an increasing awareness of the limits of the South African education research tradition and its contribution to policy making if theory and concepts are not linked to their actual application

(Jansen & Amsterdam, 2006). It has been argued persuasively that accurate measures of school finance equity are deeply intertwined with data that can be accessed by analysts (Berne & Stiefel, 1999). This study uses existing databases in a unique way, relatively unexplored in the South African research tradition, to provide a fine-grained picture of South African schooling.

- The tradition of reviewing school finance equity models to understand their specificity and impact on inequality is well established internationally. Methodologically, a range of tools has been used, including descriptive and inferential statistics, regression and correlation. This study follows in that tradition, albeit in a relatively simple form. The model of applying detailed analysis on school finance reform in one state is widely used in the United States (Cullen & Loeb, 2002; Figlio, 2002; Imazeki & Reshovsky, 2002, Nechyba, 2002; Levin & McEwan, 2001; Thompson & Wood, 2003), although this tradition as yet is underdeveloped in South Africa. It is anticipated that this research will make a contribution to the South African tradition in these areas.
- Finally, there is much debate about distributional equity – that is, equalising inputs across provinces. However, it is less clear what is happening within provinces and between schools – intra-provincial equity. Before 1998, it was difficult to establish the situation in this regard because of the absence of disaggregated school-level data. This data is now available and there have been various calls to undertake more rigorous school-level analysis (Crouch, 1998; Motala & Perry, 1998; Porteus *et al.*, 2001; Van der Berg, 2003; Crouch, 2005). A unique contribution of this research is that it disaggregates per capita funding for each school in Gauteng, rather than using the aggregate figure per learner for the province.¹ The actual per capita expenditure is established by combining personnel and non-personnel expenditure at school level, thus establishing its variability across schools for

¹ The aggregate figure for state per capita expenditure (total cost per learner) for 2002 for the Gauteng Department of Education for public ordinary schools was R4 277. The calculations of state per capita expenditure in this research have been adjusted for inflation by using the CPIX index..

the first time. Private contributions are also analysed. A much more advanced and detailed description emerges of per capita spending at school level and its relationship to various factors.

1.4 Limitations of the Study

It is acknowledged that there are limitations to the study. These include that it deals with one equity indicator only – that is, per capita expenditure – and uses a limited set of variables to explain progress towards more equitable funding in the province. While some evidence is provided on demographic shifts, these are not analysed in detail since that is not the focus of the study. The socio-economic status indicators that are used rely on the school funding norms data. These indicators have been derived from surveys of poverty of the school and poverty of the community surrounding the school to arrive at a quintile ranking for all schools (see Chapter 5 for a more detailed discussion). More extensive data, such as the census data, would have provided a more detailed picture on poverty income and the socio-economic status of the province. The study also focuses only on one province. However, it is hoped that this will provide a template for similar research in other provinces. The calculations of per capita expenditure have been undertaken through a review of personnel, non-personnel and private contributions into public schooling. There are other types of expenditures in the province. However it is widely acknowledged that the expenditure used in the study constitutes the bulk of the provincial budget. Some of these issues will be discussed in more detail in the section on methodology in Chapter 5.

1.5 Outline of Chapters

This thesis begins with a detailed literature review (Chapters 2-4) to locate the quantitative work within a clear theoretical framework for equity as it pertains to education. Given the study's primary focus, conceptions of school finance equity will receive particular attention in the course of the literature review in order to provide sound theorisation and conceptualisation of the problem. This first part of

the literature review (Chapter 2) asks the simple question of what is meant by equal education. In order to answer this, the concepts of equity, equality, indicators of inequality, and school-level inputs and resourcing receive detailed attention. Chapter 3 traces the development of policies and legislation on education financing in South Africa with particular reference to school-level financing. Chapter 4 examines how the current South African literature on education financing has considered the question of equal education and equity.

The fifth chapter of this thesis introduces the data and methodology.

Chapter 6 begins to describe the findings on whether equal education and equity have been achieved. It does this by establishing the actual state per capita income and expenditure for each school in Gauteng at two points in a four-year period. It also tracks shifts in the patterns of personnel and non-personnel per capita expenditure as components of state expenditure. A key finding of Chapter 6 is that if the main aim of education policy has been equalisation, this has been largely achieved. However, Chapter 7 uses measures of spread and further disaggregation to investigate the new and unexpected patterns of privilege and disadvantage in South African schools, and finds that there are some unexpected winners and losers. Thus while old racial patterns have shifted, unequal education persists for a different set of reasons. Chapter 7 further disaggregates the findings of Chapter 6 and establishes the relationship of state per capita expenditure to a broad range of variables including socio-economic status, school level, school type, education qualification and former department..

Chapter 8 examines the impact of private inputs in the public schooling system and explores the patterns and distribution of the inputs in much more detail. Chapter 9 aims to deepen our understanding of equity and inequality by undertaking regression analysis. Finally, Chapter 10 provides summary findings and an analysis of the implications of the research for policy making on finance equity in schooling in South Africa. It also signals further areas of research.

The structure and content of the chapters aligns with the methodological approach. The initial chapters use simple descriptive statistics to create a picture

of funding equity shifts in Gauteng. The next chapters undertake much more detailed disaggregation of the data. Chapter 8 departs from the structure of the earlier chapters, bringing together some of the key findings on private inputs into public education and subjecting it to detailed analysis. More complex and predictive relationships between per capita expenditure and key variables are analysed through regression techniques in Chapter 9.

Through this approach to analysis, I hope to make a contribution to the national and international literature on the specific form and interpretations of equity in a developing country context, provide a critical review of the financing equity model utilised in South Africa, and examine which education input derived through equity mechanisms impacts most on school funding. This will deepen our understanding of the typology of inequality in post-apartheid South Africa by utilising a broader range of variables. It will also provide a research paradigm for the study of equity in schooling which is compatible with the goals of social and political transformation.