Educational Change in South Africa 1994-2003: Case Studies in Large-Scale Education Reform

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Table of Contents

| About the Authors | III |
|--|--|
| Acknowledgements | V |
| Acronyms | VII |
| Executive Summary | 1 |
| Introduction The Country Context The Education System The Performance of Education Reform since 1994 A Framing Context for Reading Education Reforms in South Africa | 5 5 6 8 13 |
| Case Study 1: Fiscal Equity in Education Context of the Reform Reform Design, Implementation, and Analysis Significant Increases in Education Expenditures Targeted Funding Through the National Norms and Standards | 15 15 16 18 27 |
| Case Study 2: Teacher Rationalization Context of the Reform Equalization of Salary Scales Equalization of Pupil to Teacher Ratios Teacher Rationalization Policy Stakeholder Views Implementation Analysis | 29 29 29 29 31 31 31 |
| Case Study 3: Curriculum Reform Context of the Reform Reform Design and Implementation Analysis | 37 37 37 38 |
| Conclusion On the "Deep and Wide" of Systemic Reform Analysis of Education Reform Initiatives | 43 43 44 |
| SOURCES | 47 |

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Acronyms

AIDS Auto-Immune Deficiency Syndrome

C2005 Curriculum 2005

DOE Department of Education EC Eastern Cape Province

ECD Early Childhood Development

FET Further Education and Training College

FFC Fiscal and Financial Commission

FS Free State Province

GDP Gross Domestic Product

GET General Education and Training

GT Gauteng Province

HIV Human Immuno-Deficiency Virus

JET Joint Education Trust
KZN KwaZulu Natal Province

LP Limpopo Province

MEC Member of the Executive Committee

MP Mpumalanga Province

MTEF Medium Term Expenditure Framework

NC Northern Cape Province

NCS National Curriculum Statements

NEPI National Education Policy Investigation

NNSSF National Norms and Standards for School Funding

NQF National Qualifications Framework

NW North West Province

OBE Outcome-based Education

RDP Reconstruction and Development Program SADTU South African Democratic Teachers' Union

SGB School Governing Body

UNESCO United Nations Educational, Scientific, and Cultural Organization

VSP Voluntary Severance Package

WC Western Cape Province

Executive Summary

The focus of this case study of education reform is limited to three specific interventions by the South African government: education finance reform, curriculum reform, and the teacher rationalization process. These three interventions were sampled from a rich mix of reforms because they were initiated very early in the democratic transition and because there is a reasonably sound empirical base from which to make judgments about the efficacy and effectiveness of these interventions. This case study of educational reform in South Africa will present a critical analysis of the reform goals, design, implementation, and impact for each of the three interventions. In the end, the objective of this case report is to contribute new insights and understandings to the global knowledge base on education reforms in developing countries.

The post-apartheid government of 1994 inherited one of the most unequal societies in the world. Decades of social and economic discrimination against black South Africans left a legacy of income inequality along racial lines. Furthermore HIV/AIDS constitutes a massive threat to development in Southern Africa. In the general population, 11 percent of South Africans from all walks of life are HIV-positive, with 15.2 percent of this group aged between 15 and 49. Higher rates of infection are found in children aged between 2 and 14.

HIV/AIDS impacts education policy reform goals in a number of ways. It erodes *participation gains* that resulted from reform attempts to broaden access to primary, secondary, and tertiary education given that more and more students either die or drop out of school because of personal illness (HIV/AIDS-infected) or family illness (HIV/AIDS-affected). Indeed high infant mortality rates mean that fewer students than expected show up for the first year of schooling. Second, HIV-AIDS erodes *quality gains* premised on the availability of trained and experienced teachers to deliver on new curriculum or assessment reforms in the sense that more and more teachers are leaving the education system because of illness or death. The AIDS pandemic is also eroding potential *economic gains* from higher education delivering an increasingly skilled pool of graduates. Fourth, it erodes *equity gains* embedded in post-apartheid policy—given that mainly black and female students are infected and leave the education system prematurely.

While the response of the South African government has been to acknowledge the crisis in the form of strategic plans, major policy conferences, and statements on the part of the Department of Education, these broad policy positions and program interventions have to date shown little impact. One of the principal reasons for the inability of the education system to make discernible progress in the fight against AIDS is the presence of a high-profile public debate, stirred by leading politicians, about the nature, extent, and even the causes of the disease. In addition, there is widespread denial about the causes of death of AIDS victims. Under these circumstances, it is not surprising that educational programs aimed at limiting the spread of the disease and dealing with its consequences have remained marginal and stigmatized at the edges of the school curriculum.

The new South African state has achieved a number of notable successes in the post-1994 period. First, the creation of a single national department of education out of 19 racially, ethnically, and regionally divided "departments of education" was a very significant accomplishment in the early years. The creation of non-discriminatory school environments into which access was gained on the basis of criteria other than race or religion was also a very significant achievement of the new government. The creation of new institutional typologies is one of the most recent accomplishments; this includes the creation of 50 Further Education and Training Colleges (FETs) out of 150, the incorporation of colleges of education into universities, and the merging of technikons and universities in various combinations. The delivery of certain basic services, such as the supply of electricity, water, toilets, computers, and telephones has clearly improved in the last nine years.

As a result of these gains, South Africa has been able to achieve among the highest enrollment rates in African education. More than 12 million learners attend school, with gross enrollment ratios averaging over 100 percent for primary schooling and over 70 percent for secondary schools. The rate of girls' participation in schooling is one of the continent's highest.

In the field of fiscal reform, there has been a significant increase in education expenditures since 1994, with a reconstitution of the national budget away from security concerns and toward social services. Furthermore several measures have been instituted with a view to redistributing funds towards those parts of the system disadvantaged by apartheid, such as weighting provincial and school allocations according to poverty considerations, through special funding programs—such as school nutrition schemes and transport subsidies—to advance access to schooling, and through "exemption legislation" to reduce the direct costs of schooling (such as school fees) for poor parents.

However manifest inequalities between schools persist for a number of reasons. First, the sheer extent of the backlogs in apartheid education requires a much greater investment than has been achieved through existing levels of budgetary allocation. A second major source of inequality between schools arises from the ability of more privileged schools to very significantly supplement government grants through school fees. Third, the management capacity of provincial education departments to deliver on allocated budgets remains a primary explanation for under-spending on schools in the poorest provinces and hence, of inequity in the system.

A recent Department of Education report investigated ways of establishing greater equity in the distribution of resources. The Minister has acted on some of these findings, announcing that schools serving the poorest children would receive a basic grant to cover essential non-personnel, non-capital expenditures.

The teacher rationalization initiative was an early attempt by the new government to redistribute spending through the more equitable deployment of teachers—by far the largest budget item. An analysis of this initiative is instructive in revealing the government's difficulties in effecting these goals. The program is likely to have given poor schools increased resources in the form of more teachers and relatively higher teacher to pupil ratios than they had under apartheid, although it is not possible to be definitive about this in the absence of reliable data. However overall equity in the distribution of teach-

ers is likely to have diminished, through a large increase in the number of teachers employed by school governing bodies (SGBs) and a huge rise in the SGB to total teacher ratio, almost certainly concentrated in schools serving richer communities. In order to ameliorate this situation, the government is considering adjusting the post-provisioning model, a formula for allocating teachers to schools, so as to increase the bias towards poorer schools.

Despite the government's best efforts, it would seem that, because of the ability of the middle class to supplement state expenditure in very significant proportions, absolute equity in spending is only attainable by limiting parents' contributions. The government argues against this course, on the grounds that the inflow of private resources increases the quantum of state expenditure available for redistribution. A second important consideration concerns the advantages of keeping a significant fraction of the middle class in the public system and finding the tipping point at which the emigration of children of professional parents and the new political class to the private system reaches exodus proportions.

In addition to a number of unintended consequences, the teacher rationalization program also experienced implementation difficulties, including a failure to pace the rollout within budget, resulting in massive spending overruns, and resistance on the part of more affluent schools to having to employ teachers from a prescribed list. The initiative was also not planned within a systemic perspective and coordinated with other reform programs, such as the implementation of a radically new curriculum for schools. The teachers' education and their supply and deployment are critical issues in the institution of a new curriculum, yet the implementation of Curriculum 2005 (C2005) was accompanied by a destabilization of the profession through the rationalization program and a radical restructuring of institutions responsible for teacher education.

The heart of school reforms since 1994 was the establishment of the comprehensive curriculum project called Curriculum 2005, a progressive model of education based on the principles of outcome-based education. In essence, this curriculum called for a form of learner-centered education which placed the teacher in the role of facilitator.

Since its introduction in January 1998 into all Grade 1 classrooms, the curriculum was heavily criticized in academic and (certain) professional circles for the following reasons: a highly inaccessible and complex language; the under-preparation of teachers for this complex curriculum; large-scale discrepancies in resources and capacity between the few privileged schools and the large mass of disadvantaged schools with respect to implementation.

Another line of argument took an epistemological perspective: the under-specification of the curriculum content and the priority given to integration was likely to lead to the submergence of conceptual knowledge in the everyday, and well-resourced teachers and schools were more likely to implement the curriculum as intended than teachers in poor schools. C2005 could therefore result in an exacerbation of existing inequalities in terms of access to high-level conceptual knowledge. The second Minister of Education recognized these deficiencies in C2005's design and content, and called for a review of the curriculum. The Curriculum Review Committee recounted the problems anticipated in earlier writings and recommended a greatly simplified and more clearly specified curriculum. The

Minister then introduced a "streamlined curriculum" (or thin version of C2005), removing some of the burdensome language architecture and establishing a much simpler and more accessible curriculum framework.

It is not clear how the implementation problems which plagued the first incarnation of C2005 are to be addressed. A principal finding of the Review Committee was that the training model was both badly designed and implemented. This remains a serious inhibition on the effectiveness of all education reforms at the present time. The recent Report to the Minister acknowledges that the weakness of government management systems, and in particular the virtual absence of monitoring and other accountability mechanisms, is a major problem. But in the absence of government moves in this direction, schooling is driven by an exclusive focus on supply-side measures. In the absence of outcome indicators, there is no way of knowing whether the redistribution of resources is resulting in a more equitable distribution of opportunities and outcomes.

There is no question that during the first nine years of its existence, the first democratic government in South Africa has made significant advances in the schooling sector. The three educational reform initiatives discussed in this review provide ample evidence of this: provision is now more equitably provided than at any time in the country's history. At the same time, taken together, the three case studies offer powerful evidence that a lack of systemic thinking and implementation capacity have been major barriers to reaching the stated goals of educational reform in post-apartheid South Africa. Indeed there is every indication that basic education in South Africa remains one of the most inefficient and ineffective in Africa, despite the disproportionate per-capita amounts spent on South African pupils.

The challenge for the next decade is to tackle reform at a more fine-grained level in order to maximize benefits down to pupils in classrooms. This will require three kinds of consideration:

- integrated systemic thinking;
- an attention to the key mechanisms of implementation—management systems; and
- systematic monitoring to assess whether the goals are being met or frustrated by unintended consequences.

Introduction

In 1994 South Africa formalized the transition from apartheid to a non-racial democracy with national elections that led to the installation of Nelson Mandela as the first president of the Government of National Unity. The product of a negotiated settlement, Mandela's African National Congress dominated the new multi-party government and set an ambitious agenda for social and educational reform. However as in other negotiated settlements (such as regional neighbors Namibia and Zimbabwe), the declaration of radical social policies were in practice tempered by the expectation of conciliatory politics and, in South Africa's case, by a post-Cold War, global economic order that demanded liberalization (rather than radicalization) of the social and economic policies. It is within this context that this study reviews and evaluates the educational reform program of the post-apartheid government.

The focus of this case study of education reform will be limited to three specific interventions by the new government: curriculum reform, education finance reform, and the teacher rationalization process which commenced in 1996. These three interventions were sampled from a rich mix of reforms because they were initiated very early in the democratic transition and because there is a reasonably sound empirical base from which to make judgments about their efficacy and effectiveness. This case study will present a critical analysis of the reform goals, design, implementation, and impact for each of the three interventions. In the end, this report's objective is to contribute new insights and understandings to the global knowledge base on education reforms in developing countries.

The Country Context

South Africa is a middle-income country with a GDP of R1,0992 billion in 2000/01 and a population of 43.3 million. In 2002, the country's GDP stood at US\$97.8 billion with GDP per capita of US\$2,167, real GDP growth of 2.4 percent, with inflation at 7.1 percent, and unemployment at 23 percent. The population is roughly 78 percent black, 10 percent white, 9 percent colored, and less than 3 percent Indian (National Treasury 2003).3

The post-apartheid government of 1994 inherited one of the most unequal societies in the world. Decades of social and economic discrimination against black South Africans left a legacy of income inequality along racial lines. In this context the poorest 40 percent of the population earned only 11 percent of income and the wealthiest 10 percent earned 40 percent (May 1998; National Treasury 2001). It is estimated that 50 percent of the population lives below the poverty line and while 3 percent of whites live in poverty, nearly 60 percent of black South Africans are poverty stricken. 4 Unsurprisingly,

¹ The concept of non-racialism is a peculiar South African term roughly meaning "without reference to race" as discriminator. In the long history of apartheid, obsessed as it was with racial definition and discrimination, non-racialism, driven by the mass democratic movement under the leadership of the African National Congress (ANC), was the conceptual counter to the racist preoccupations of the former South African state. ² This translates to a GDP of \$137.4 billion at R8 to the American dollar or a per capita of \$3,023.

³ While racial equality is the goal of the new society, it will take many years to eradicate racial inequalities in

the distribution of wealth, and therefore population group remains an important category in tracking change. ⁴ It is likely that considerable progress has been made in deracializing the composition of the upper income quintile, although no figures are available to verify this assertion.

South Africa has a two-tiered economy, one developed, largely white, and similar to other First World states; and one underdeveloped, largely black, and with only the most basic infrastructure.

The unitary system of government consists of three spheres: national, provincial, and local government, with significant decentralization of powers and functions, including budgeting. The primary role of national government is to shape policy, and the role of the nine provincial governments is mainly to implement policy. National and provincial governments are concurrently responsible for functions like education, health, and social welfare. In each of the nine provinces, there are municipalities (284 in total) which are categorized as metropolitan, district or local structures, and include political and administrative components. National and provincial elections are on a proportional basis while the local levels include directly elected and proportional representation.

There are also strong regional imbalances, with one of the nine provinces (Gauteng) accounting for about 41.6 percent of the country's GDP—despite the fact that it has only 18 percent of the population. In addition, most of the provinces receive more than they could raise from taxes in the revenue-sharing approach which is a fundamental feature of the fiscal system. The provinces receive 59 percent of the allocation (R159 billion) while national government receives 38.9 percent (R109 billion) and local government 4.3 percent (R12 billion).

A major challenge of the new government, therefore, was to redress the inherited inequalities through social and educational reforms. Through the Reconstruction and Development Program (RDP) of the earlier years of transition (1994-1999), major achievements were recorded. More than 1.2 million low-cost houses have been constructed and four million people are now connected to water. Despite these early gains, South Africa ranks very low on almost every major development social indicator. For example, South Africa's health system is ranked 175th out of 191 member states by the World Health Organization. The challenge for education reform would be formidable.

The Education System

The Ministry of Education sets national policy through the declaration of norms and standards which are developed through its bureaucratic arm, the national department of education, and implemented by the nine provincial departments of education in South Africa's 29,000 schools. The 36 institutions of public higher education, recently reduced to 21 universities and technikons, are a "national competence" and fall directly under the Ministry of Education, even though these institutions enjoy autonomous status.

Each province has its own legislature headed by the province's Premier who has a cabinet consisting of members of the Executive Committee (MECs). The MEC for Education is the political head under whom there is a Head of Education leading the provincial bureaucracy for education. Each province

has a set of education districts (and sometimes smaller units called circuits) with departmental officials responsible for that district's schools.⁵ Each school is governed by a legally established SGB composed of parents, teachers and, in the case of secondary schools, also learners.

South Africa has a quasi-federal system of public spending in which funding is split between the national government (e.g., higher education) and the nine provincial governments (e.g., school education). The amount flowing to the provinces is determined on the basis of a predetermined revenue-sharing formula. The provinces therefore decide on the level of financing of school education (in relation to other social sectors) as well as the distribution of education finance across school education, early childhood education, adult education, etc. (see Crouch and Lombard 2000).

In terms of the goals set for educational transformation since the change of government in 1994, the following are prominent:

- equity, because of the gross levels of inequality in education funding, something reflected in the visible disparities between former-white and black schools;
- efficiency, because of the high levels of wastage expressed in terms of high dropout and repetition rates:
- quality, because of the documented poor quality of teaching and learning in schools;
- effectiveness, because of the poor response in educational performance to the high levels of funding to education; and
- *democracy*, because of the legacy of authoritarian practices in education generally and the concomitant lack of parental participation in school governance.

In terms of access to schooling there is no great difference between boys and girls, with the gross enrollment rate close to and in some cases exceeding 100 percent for both genders. Table 1 shows enrollment by gender at primary and secondary levels in 2000.

| | Table 1 Enrollment by Ger Year 2000 | nder |
|-------------------------|---|---|
| | Primary | Secondary |
| Male Female Total | 3,844,574 (51.1%) 3,683,321 (48.9%) 7,527,895 | 1,915,598 (47%) 2,156,872 (53%) 4,072,470 |

Source: Strauss, Plekker, and Strauss (2000).

⁵ School districts in South Africa have no political significance. They do not coincide with magisterial or voting districts and their delineation is largely a matter of administrative convenience within each province. Although there have been attempts in all provinces to restructure districts, in some cases more than once, they still enjoy little managerial autonomy.

Furthermore not only are girls holding their own in terms of access to schooling, but research currently in publication indicates that for all four race groups, girls outperform boys in the matriculation examinations.

This pattern contrasts strongly to that prevailing in most African countries, where access is heavily skewed in favor of boys. The composition of the teacher corps is also exceptional when compared to many countries on the continent, with women in a decided majority in South Africa. However there is an imbalance favoring men in the system's upper-management levels.

There is a consistent line drawn in all education and training policy documents about the relationship between education and economic growth, between technological development and global competitiveness, between investment in human resources and social development, between curriculum revision and the achievement of citizenship, democratization, and tolerance. In other words, there is a strong alignment made in official policy between education and development.

But how has the system actually performed in the period since 1994?

The Performance of Education Reform Since 1994

There are few modern democracies that have produced more policies, laws, and regulations to govern education than post-apartheid South Africa. Since 1994 a succession of discussion documents, Green Papers, White Papers, new legislation, and amendments to existing laws and regulatory procedures have accumulated within the education bureaucracy. Most of these documents were produced under the first minister of education (Professor Sibusiso Bengu 1994-1999), with the trend slowing down considerably under the second minister (Professor Kader Asmal 1999-present). What characterized the second ministerial period, was the announcement by Minister Asmal of several policy reviews to take account of the impact of the plethora of earlier policies on the education system (see Jansen 2001:41-57; Department of Education and Department of Labor 2002:131). It is this combined period that constitutes the primary frame of reference for the evaluation of the education reforms in the post-apartheid period.

In judging the achievements of education reform in South Africa, it is important to begin with a lucid analysis of governmental action in the period 1994-2002. However such analysis would have limited intellectual or practical value if it rested on the assumption that within nine years there would be dramatic changes in the performance of what was, until recently, one of the most divided education systems in the world, entrenched for many decades in the regressive practices of racism, sexism, authoritarianism, and inequality. Nevertheless the window of nine years of educational change provides more than enough space and content for posing the following evaluative question about the durability of these reforms: to what extent did governmental action in the period 1994-2003 lay the groundwork for long-term and sustainable improvements in the education system?

There is consensus among policy analysts about a widely observed policy-practice "gap" within South African education since the inauguration of the Government of National Unity in April 1994 under the

Mandela Administration. The evidence is available in abundance (Kallaway et al. 1998; Manganyi 2001; Hartshorne 1999; Jansen and Christie 1999).

However the reasons for this underperformance of education policy are strongly contested; the dominant view holds that "the policy gap" can be explained by the weak capacity within the new state, the lack of material resources for learning (such as textbooks), the restricting role of national examinations (especially at matriculation level), the weak academic and professional knowledge base of practicing teachers, and the underdeveloped infrastructure for modern schooling, especially in rural areas (Kahn 1996:281-289; Samoff 1996; Sayed 2001). A contrasting but minority view is that the distance between policy and practice is more powerfully explained by the politics of transition or what Hans Weiler called "the putative political costs of reform," that is, the conscious decision to scale back on radical reform interventions given the political resistance and contestation that might flow from such dramatic action (Weiler 2001:7; Jansen 2002:199-215). The decision to reduce the status of religious education in schools and the introduction of whole-school evaluations are but two examples of such costs (Jansen 2003a; Jansen 2003b). In the case of religious organizations launched public protests and, in the case of evaluation, the teachers' unions caused major disruptions to scheduled implementation in some provinces.

It would be useful, however, to begin with some of the accomplishments of the South African state in the post-1994 period. First, the creation of a single national department of education out of 19 racially, ethnically, and regionally divided departments of education was a very significant accomplishment in the early years. Recasting the single national department into nine provincial departments of education was not as easily achieved, but it did create a new political basis for the governance of education that nullified the logic of race in the education system's constitution.

Second, the creation of non-discriminatory school environments into which access was gained on the basis of criteria other than race or religion was also a very significant achievement of the new government. While the inevitable racial confrontations—such as in Vryburgh, Bryanston, Potgietersrus, and Ruyterwacht—made national media headlines, these were isolated incidents in the vast landscape of desegregation in South Africa's 27,000 schools.

Third, the generation of a formidable architecture of policies and laws (or what South Africans tend to call frameworks) to govern education was set in place, with ambitious goals and lofty ideals for new programs, schools, colleges, technikons, and universities. One such accomplishment was the National Qualifications Framework (NQF) that has become an important lever for systems change through qualifications reform. A recent review of the NQF made the following pertinent observation:

The National Qualifications Framework was established as an emblem and an instrument of the single national high-quality education and training system that democratic South Africa aspired to create. Thousands of South Africans have participated in its shaping and development. In a remarkably short space of time the NQF has become woven into the fabric of the South African learning system (Department of Education and Department of Labor 2002:131).

| | | Natio | onal Senio for Sele | r Certifi | | | | lts | | | | |
|-------------------|----------|-----------|------------------------|-----------|---------|--------|---------|----------|----------|---------|----------|------|
| F | Province | | | | | Freque | ncy Dis | tributio | n of Pas | s Rates | | |
| Name | Total N | lumber of | Schools | 0- | 20% (in | %) | 21- | ·40% (ir | า %) | 41 | -80% (in | %) |
| | 1999 | 2000 | 2001 | 1999 | 2000 | 2001 | 1999 | 2000 | 2001 | 1999 | 2000 | 2001 |
| Eastern Cape | 909 | 880 | 896 | 27.9 | 14.3 | 24.2 | 32.1 | 33.3 | 29.4 | 19.1 | 24.2 | 19.8 |
| Free State | 325 | 324 | 333 | 26.8 | 13.3 | 7.2 | 23.4 | 27.2 | 21.6 | 16.3 | 18.8 | 22.5 |
| Gauteng | 628 | 629 | 637 | 15.8 | 7.5 | 3.8 | 22.8 | 18.8 | 12.2 | 16.6 | 20.8 | 19.6 |
| KwaZulu Natal | 1,240 | 1,298 | 1,360 | 16.6 | 14.2 | 7.5 | 26.1 | 24.8 | 19.7 | 24 | 23.1 | 24.7 |
| Mpumalanga | 378 | 389 | 399 | 12.7 | 4.6 | 14 | 32.3 | 31.4 | 33.1 | 24.9 | 28.5 | 26.8 |
| Northern Cape | 107 | 101 | 104 | 7.5 | 3 | 0 | 15 | 12.9 | 2.9 | 15 | 14.9 | 8.7 |
| Northern Province | 1,254 | 1,310 | 1,335 | 23 | 9.4 | 2.5 | 37.8 | 27 | 16.5 | 22.7 | 30.2 | 29.1 |
| North West | 356 | 367 | 377 | 10.7 | 3.5 | 1.3 | 26.4 | 19.9 | 17.8 | 27.5 | 33.2 | 28.6 |
| Western Cape | 361 | 353 | 375 | 2.2 | .6 | 2.9 | 6.9 | 4.8 | 4.3 | 9.1 | 12.2 | 10.9 |
| Total | 5,558 | 5,651 | 5,816 | 18.6 | 9.9 | 8.1 | 28.2 | 24.8 | 19.2 | 20.8 | 24.6 | 23.5 |

| | | N | | enior Ce | | tinued) Examina ts (1999- | | sults | | | | |
|-------------------|------|---------|--------|----------|---------|---------------------------------|-----------|------------|------|-------|---------|--------|
| Province | | | | Fre | equency | Distribu | tion of F | Pass Rat | es | | | |
| Name | 6 | 61-100% | (in %) | | 81-100% | % (in %) | Exac | ctly 0% (i | n %) | Exact | ly 100% | (in %) |
| | 1999 | 2000 | 2001 | 1999 | 2000 | 2001 | 1999 | 2000 | 2001 | 1999 | 2000 | 2001 |
| Eastern Cape | 8.4 | 13.5 | 12.4 | 12.4 | 14.7 | 14.3 | 3.6 | 1 | 2 | 4.6 | 4.9 | 4.2 |
| Free State | 8 | 12 | 21.3 | 25.5 | 28.7 | 27.3 | 3.4 | 0 | .3 | 0 | 7.7 | 6.9 |
| Gauteng | 10.4 | 15.7 | 21.2 | 34.6 | 37.2 | 43.2 | 1.3 | 2.2 | .9 | 9.9 | 6.8 | 10.4 |
| KwaZulu Natal | 15.2 | 19 | 23.5 | 18 | 18.9 | 24.6 | 1.4 | 1.9 | 1 | 5 | 2.5 | 5 |
| Mpumalanga | 12.4 | 20.1 | 10.8 | 17.7 | 15.4 | 15.3 | 0 | .3 | .8 | 2.4 | 2.6 | 3.5 |
| Northern Cape | 18.7 | 21.8 | 20.2 | 43.9 | 47.5 | 68.3 | 2.8 | 1 | 0 | 15.9 | 20.8 | 26.9 |
| Northern Province | 10.2 | 22.1 | 27.9 | 6.3 | 12.1 | 24 | .7 | .8 | .1 | 1.3 | 1 | 3.7 |
| North West | 15.4 | 22.1 | 26.8 | 19.9 | 21.3 | 25.5 | .3 | .5 | .3 | 4.2 | 3.5 | 5.8 |
| Western Cape | 16.9 | 22.4 | 22.4 | 64.8 | 60.1 | 59.5 | 0 | 0 | 2.1 | 27.1 | 18.4 | 21.3 |
| Total | 12 | 18.6 | 21.6 | 20.4 | 22.2 | 27.5 | 1.5 | 1.1 | .9 | 6.4 | 4.7 | 6.7 |

Source: Department of Education (2002).

Fourth, the small but important increases in end-of-school or matriculation pass rates represent another achievement of the new government, especially in the second phase (1999 onward). While the meaning of these improved results are frequently contested, there can be little question that unprecedented political pressure on the schooling system to perform—at least in terms of matriculation results—has found a response in many of the provinces. Table 2, for example, shows a significant reduction in the proportion of schools with pass rates lower than 40 percent and a concomitant increase in those in which the pass rate exceeds 40 percent.

Fifth, the creation of new institutional typologies is one of the new government's most recent accomplishments. This includes the creation of 50 FETs out of 150, the incorporation of colleges of education into universities, and the merging of technikons and universities in various combinations. The new institutional landscape is still being forged and in places heavily contested through both politics and the courts. Nevertheless there can be little dispute about the fact that most of the mergers, closures, and incorporations have been accomplished *despite* the inevitable difficulties—organizational, financial, and political—of creating new institutions (Jansen et al. 2002).

Sixth, the delivery of certain basic services has clearly improved and remains at very high levels. In this regard, one of the most closely monitored areas of performance relates to the delivery of learning materials. While the delivery of textbooks is more difficult to estimate comparatively, 6 the delivery of stationery indicates favorable cross-provincial performance (see Table 3).

| | Table 3 rformance of the Provinc n the Delivery of Stationa | |
|---------------|---|--|
| Province | Performance 2001 % Stationary Delivered | Performance 2002 % Stationary Delivered |
| Eastern Cape | 53 | Varied, 45-88 ² |
| Free State | 98 | 100 |
| Gauteng | 98 | Varied, 45-88 ² |
| KwaZulu Natal | 31 | 97 (all schools covered) |
| Mpumalanga | 100 | 100 (all schools covered) |
| North West | 90 | 100 (all schools covered) |
| Northern Cape | 95 | 90 (96% of schools covered) |
| Limpopo | 98 | 100 |
| Western Cape | 89.3 | 85.9 |

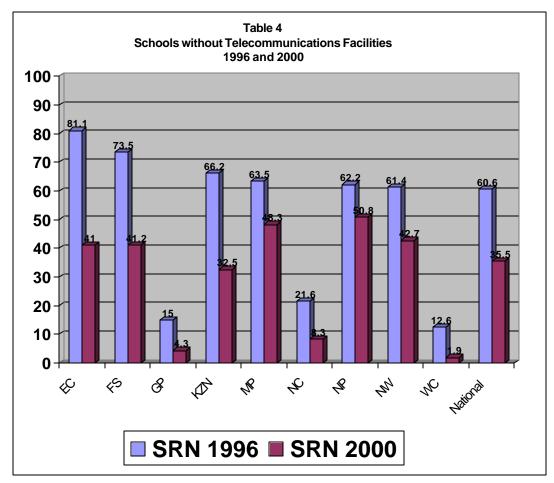
Source: Asmal (2001; 2002).

(1)Percent delivered per order.

(2) Varies according to school district.

⁶ The delivery of textbooks in departmental data collection efforts is reported differently from year to year. For example, in Asmal (2001), the data is reported for Grades 4 and 8, 1-9, and in general (without grade references). However, in Asmal (2002), the same data is reported.

The delivery of basic services has clearly improved in other areas as well. Comparing the years 1996 and 2000, schools without telephones decreased from 59 percent (1996) to 36.4 percent (2000); the percentage of schools without running water decreased from 34 percent to 27 percent; the percentage of students without access to proper toilet facilities declined from 55 percent (6.6 million students in 1996) to 16 percent (1.9 million students in 2000); access to electricity improved from 40 percent of all schools to 54.9 percent; and the number of schools with computers increased from 2,241 to 6,581 (Table 4) (Department of Education 2000).



Source: Department of Education (2001).

Finally, South Africa has been able to achieve among the highest enrollment rates in African education. More than 12 million learners attend school, with gross enrollment ratios averaging over 100 percent for primary schooling and over 70 percent for secondary schools. Also, as pointed out above, the girls' participation rate in schooling is one of the highest in the continent. Given the deep disaffection among black youth and communities with state education during the anti-apartheid struggle and the poor infrastructure for schooling in the larger provinces, such high participation rates represent significant achievements in education.

These positive achievements must, however, be understood against the backdrop of the overriding effects of HIV/AIDS, which has found its most fertile and contemporary context in Southern Africa.

A Framing Context for Reading Education Reforms in South Africa

There can be little question that HIV/AIDS constitutes the most immediate and comprehensive threat to education reform in Southern Africa (Bennell, Hyde, and Swainson 2002). In the general population, 11 percent of South Africans from all walks of life are HIV-positive, with 15.2 percent of this group aged between 15 and 49. Higher rates of infection are found in children aged between 2 and 14 (Human Sciences Research Council 2002). Based on antenatal survey findings, the highest provincial prevalence rate was recorded in KwaZulu Natal (33.5 percent), followed by Gauteng (29.2 percent) and Mpumalanga (29.2 percent).

HIV/AIDS impacts education policy reform goals in several ways. First, it erodes *participation gains* that resulted from reform attempts to broaden access to primary, secondary, and tertiary education, given that more and more students either die or drop out of school because of personal illness (HIV/AIDS-infected) or family illness (HIV/AIDS-affected). Indeed high infant mortality rates mean that fewer students than expected show up for the first year of schooling. Second, it erodes *quality gains* premised on the availability of trained and experienced teachers to deliver on new curriculum or assessment reforms in the sense that more and more teachers leave the education system because of illness or death. Third, it erodes potential *economic gains* from higher education delivering an increasingly skilled pool of graduates. Fourth, it erodes *equity gains* embedded in post-apartheid policy, given that mainly black and female students are infected and leave the education system prematurely. Fifth, it erodes *planning capacity* within the national and provincial education departments, as key personnel themselves are infected and affected by HIV/AIDS. But in a context where there is very little systematic collection of AIDS data and where there is a perceived national climate of ambiguity around the nature and extent of the crisis, it is very difficult to excavate clear streams of data on the subject.

One concrete example of the effects of HIV/AIDS on education reform can be found in recent localized studies on mortality and attrition among learners and teachers (Badcock-Walters et al. 2003). This research, limited to the KwaZulu Natal province, demonstrated that AIDS *adds to* existing high levels of educator attrition of 7 percent; that AIDS *contributes* to the decline in Grade 1 enrollments of 12 percent in 1999 and 24 percent in 2000; and that AIDS *exacerbates* the mortality rates among educators, expected to rise to 5 percent by 2010. While much of this data is unstable due to poor monitoring systems, "the hard evidence of certified mortality by age and gender [also] tells us that educators are dying at about three times the rate of the equivalently aged general population without AIDS" (Badcock-Walters et al. 2003).

The response of the South African government has been to acknowledge the crisis in the form of strategic plans, major policy conferences and statements and, on the part of the Department of Education, the elevation of AIDS to Program 1 in the Minister of Education's Implementation Plan. In programmatic terms, the department implemented a life skills and HIV/AIDS program in schools, created a program to monitor and support orphans and other vulnerable children in schools, and

launched a children's television program—*Takalane Sesame*—for young children, featuring a muppet born with HIV and orphaned by AIDS.

These broad policy positions and program interventions have had little impact for the following reasons. First, there remains a high-profile public debate, stirred by leading politicians, about the nature, extent, and even the causes of HIV/AIDS. This has created apathy and ambiguity around the disease and the lack of a single, consistent, and powerful public health message about the disease. Second, the interventions have been fragmented in scope and limited in funding and therefore have had little impact at the school level. And third, there has been little attempt to mainstream HIV/AIDS in the education system, with the result that programs have remained marginal and stigmatized at the edges of the school curriculum.

With these general achievements and challenges in mind, it is important to trace the effects of change within specific education reforms since 1994.

Case Study

Fiscal Equity in Education

Context of the Reform

Since 1994, the South African government has used a combination of fiscal measures to achieve the goal of equity in education. These measures were intended to redress the considerable gap between rich and poor schools in terms of overall quality of education to improve access to education for more and poorer learners, to promote inter-provincial equity in funding, given the differential tax base and educational infrastructure of the nine provinces, and to achieve performance equity across schools and provinces as a result of the ineffective utilization of funded resources.

This reform was motivated very strongly by fundamental demands of the liberation movement (in exile) and the mass democratic movement (inside the country) for equity in education. The differential funding of white and black schools was a prominent and consistent part of the anti-apartheid struggle. The student and teacher organizations, parent organizations, trade unions, and political movements all made fiscal equity an important platform for educational change after apartheid. There was therefore political pressure on the new state to deliver (and to be seen to be delivering) on this basic demand of a historical struggle for equity in education. There was no visible opposition to this reform goal, except that the negotiations that led to a political settlement included an understanding that there would not be a cap set on private contributions to schooling. This meant that white (and other middle-class) parents could continue to privately fund public schools through very high school fees to maintain what they saw as acceptable standards of education. One of the main avenues for the utilization of such fees was the employment of additional teachers, referred to as governing body appointments (as opposed to state-appointed teachers), presumably to keep down the teacher to learner ratios in these schools. In the years following the 1994 transition, the visible and sustained inequalities were challenged by activist groups with a focus, in particular, on the unlimited private funding of public institutions and the constitutionality of school fees (Vally and Tleane 2001; Fiske and Ladd 2002).

The logic of activists (and some within government) is that one way of dealing with inequalities is to prevent the largely white and middle-class communities from increasing the resources and capacity of public schools through unlimited private contributions by parents—in other words, to set a limit on what parents could be charged through school fees and other kinds of private contributions. But, as already mentioned, the decision not to set such limits on private contributions to public schooling was a specific agreement in the political negotiations that led to the new South Africa. Such unresolved tensions might explain the current review of such practices by the government's department of education (Department of Education 2003).

Reform Design, Implementation, and Analysis

The mechanisms for achieving fiscal equity included a range of specific interventions (Department of Education 2003), among which the following are the most prominent:

- real increases in planned overall education expenditure—that is, by increasing significantly the amount of money available for education through the central budget (see Table 5);
- · weighted funding plans that privileged poor provinces to address inter-provincial inequalities;
- special funding programs—such as school nutrition schemes and transport subsidies—to advance access to schooling;
- exemption legislation to reduce the direct costs of schooling (such as school fees) to poor parents (this legislation is contained in the South African Schools Act);
- pro-poor funding of schools placed on a resource targeting list for special attention; this specific mechanism is called the Norms and Standards for School Funding; and
- reviews of alternatives for reducing the indirect costs of schooling (such as school uniforms).

In this case study of education reforms targeting fiscal equity, the analysis falls on perhaps the two most ambitious of these interventions: the planned increase in overall expenditures, and the norms and standards for school funding.

| by F | Race Group | | Social Spen 1993, 1995, | | | |
|-------------------------|------------|--------|----------------------------|--------|--------|--------|
| | Year | Black | Colored | Indian | White | TOTAL |
| All social services: | 1993-95 | 8,375 | -417 | -395 | -1,455 | 6,108 |
| Spending Increase (Rm) | 1995-97 | 14,467 | 318 | -74 | -35 | 14,677 |
| | 1993-97 | 22,842 | -99 | -470 | -1,490 | 20,785 |
| All social services: | 1993-97 | 14.1% | -10.2% | -16.8% | -16.6% | 5.7% |
| Per Capita Increase (%) | 1995-97 | 22.6% | .2% | -5% | 6% | 17.1% |
| | 1993-97 | 39.8% | -10% | -20.9% | -17.1% | 23.8% |
| Schooling: | 1993 | 58.1% | 14.3% | 5.9% | 21.6% | 100% |
| Share of Spending (%) | 1995 | 70.5% | 10.9% | 4% | 14.7% | 100% |
| | 1997 | 79.2% | 8.2% | 2.6% | 9.9% | 100% |

Source: Van der Berg (2001:140-164).

| | | | Total S | Table 6 Total State Financing of Education | e 6 ing of Educa | tion | | | | |
|---------------------------------------|-------------|-------------------------|-------------|---|---------------------|--|-------------|-------------|-------------------------------------|-------------|
| | | | • | -inancial Da | ta Accordinę | Financial Data According to Financial Year | l Year | _ | | |
| | | | Actual (| Actual Outcome | | | Preliminary | ng | Budget Estimates | ıtes |
| | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/2000 | 1999/2000 2000/04 | 2001/02 | 2002/03 | 2003/04 | 2004/05 |
| | (R million) | (R million) (R million) | (R million) | (R million) | (R million) | | (R million) | (R million) | (R million) (R million) (R million) | (R million) |
| GDP ¹ | 564,164 | 635,183 | 699,618 | 753,829 | 821,144 | | 990,000 | 1,082,800 | 1,178,900 | 1,277,500 |
| Total State Finance | 151,385 | 175,490 | 189,948 | 201,416 | 214,750 | 233,942 | 262,590 | 287,909 | 311,231 | 334,561 |
| Education System ² | 33,773 | 42,068 | 44,061 | 45,220 | 46,854 | 50,769 | 55,186 | 59,669 | 63,736 | 67,223 |
| Department of Education | 257 | 286 | 128 | 493 | 416 | 200 | 575 | 834 | 917 | 753 |
| Operating Costs | 22 | 126 | 126 | 109 | 170 | 188 | 198 | 232 | 260 | 286 |
| Other | 200 | 160 | 0 | 384 | 246 | 312 | 377 | 602 | 657 | 467 |
| Higher Education | 4,073 | 5,207 | 5,431 | 6,003 | 6,610 | 7,014 | $7,532^{5}$ | 7,969 | 8,427 | 8,924 |
| Formula and ad hoc | 4,073 | 4,907 | 5,231 | 5,703 | 6,220 | 6,570 | 7,082 | 7,469 | 7,957 | 8,426 |
| NSFAS | 0 | 300 | 200 | 300 | 390 | 444 | 450 | 200 | 470 | 498.2 |
| College/School Education ² | 29,444 | 36,575 | 38,502 | 38,723 | 39,828 | 43,255 | 47,079 | 50,865 | 54,392 | 57,546 |

Source: National Treasury (2003).

 National Treasury's Report, Budget Review 2002, Table 1 of Annex B.
 National Treasury's Report, Budget Review 2002, Table 1 of Annex B.
 The data excludes educational services not administered by the Department of Education.
 Conditional grants and earmarked funds.
 Excludes a once-off expenditure of R58,273 million from the adjustment estimates for 2000/01, especially for the January 2001 student fee difference of each higher education institution's fees (tuition as well as hostel fees) and that of the incorporated teacher training college(s).

(5) Includes the incorporation of 28 teacher training colleges into universities and technikons.

| Statistical Analysis of the Financial Data in Table 6 (as % of GDP) | | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 |
| Total state finance | 26.83 | 27.63 | 27.15 | 26.72 | 26.16 | 25.67 | 26.52 | 26.59 | 26.40 | 26.19 |
| Education system | | | | | | | | | | |
| (incl. DOE) | 5.99 | 6.62 | 6.3 | 6 | 5.71 | 5.57 | 5.57 | 5.51 | 5.41 | 5.26 |
| Higher education | | | | | | | | | | |
| (excl. NSFAS) | .72 | .77 | .75 | .76 | .76 | .72 | .72 | .69 | .67 | .66 |
| Higher education | | | | | | | | | | |
| (incl. NSFAS) | .72 | .82 | .78 | .8 | .81 | .77 | .76 | .74 | .71 | .7 |
| College/school | | | | | | | | | | |
| education | 5.22 | 5.76 | 5.5 | 5.15 | 4.85 | 4.75 | 4.76 | 4.7 | 4.61 | 4.50 |

| Statistical Analysis of the Financial Data in Table 6 (as % of total state finance) | | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 |
| Education system | | | | | | | | | | |
| (incl. DOE) | 22.31 | 23.97 | 23.2 | 22.45 | 21.82 | 21.7 | 21.02 | 20.72 | 20.48 | 20.09 |
| Higher education | | | | | | | | | | |
| (excl. NSFAS) | 2.69 | 2.8 | 2.75 | 2.83 | 2.9 | 2.81 | 2.7 | 2.59 | 2.56 | 2.52 |
| Higher education | | | | | | | | | | |
| (incl. NSFAS) | 2.69 | 2.97 | 2.86 | 2.98 | 3.08 | 3 | 2.87 | 2.77 | 2.71 | 2.67 |
| College/school | | | | | | | | | | |
| education | 19.46 | 20.84 | 20.27 | 19.23 | 18.55 | 18.49 | 17.93 | 17.67 | 17.48 | 17.20 |

Significant Increases in Education Expenditures

There has been a significant increase in education expenditures since 1994. In fact, education expenditures rose from R31.8 billion in 1994 to R51.1 billion in 2000, stretching further to R55.1 billion in 2001/02 (preliminary outcome). Of the latter amount, more than R7 billion is spent on higher education and more than R47 billion on college education. To illustrate the scale of commitment to education expenditures, four years ago about R200 million was spent on learner-support materials. In 2000/2001, this amount increased to about R1 billion (Department of Education 2001:1). Education expenditures in South Africa account for almost 6 percent of GDP (see Table 6), and this falls within one of the highest rates of government investment in education (National Treasury 2000:29). In addition, education accounts for as much as 40 percent of provincial budgets and this commitment covers school education, adult basic education, early childhood development, and education for learners with special needs. As can be seen from Table 7, provincial education expenditures grew from R38.7 billion in 1998/99 to R43.2 billion in 2000/01 to (adjusted) R50.8 billion in 2002/03. Overall, education expenditures have grown in real terms since 1995/96, despite below-inflation growth between 1998/99 and 1999/00. But in 1999/00, five provinces saw declines in real education expenditures (Eastern Cape, KwaZulu Natal, Northern or Limpopo province, Northern Cape, and Western Cape).

| Table 7 Education Expenditures by Province | | | | | | | | |
|--|--------------|-------------------|--------------|----------------|------------------------|--|--|--|
| | Actual | Estimated | Med | ium-term Estim | ate | | | |
| R million | 1998/99 | Actual 1999/00 | 2000/01 | 2001/02 | 2002/03 | | | |
| | 6,585 | 6.839 | 7.379 | 7.630 | 7,956 | | | |
| Eastern Cape | 2,612 | 2.785 | 3,073 | 7,630 3.277 | 3,426 | | | |
| Free State | 6,045 | 6,310 | 6,835 | 7,229 | 7,657 | | | |
| Gauteng | 7,124 | 7,299 | 8,158 | 8,809 | 9,306 | | | |
| KwaZulu Natal | | 7,299 2.809 | , | 3.103 | 3,222 | | | |
| Mpumalanga | 2,624 878 | 2,809 896 | 2,907 963 | 3,103 1.013 | 1,066 | | | |
| Northern Cape | | | | , | 7,119 | | | |
| Northern Province | 5,793 | 5,856 | 6,212 | 6,657 | 3,945 | | | |
| North West | 3,196 | 3,408 | 3,624 | 3,550 | 3,943 4,462 | | | |
| Western Cape | 3,822 | 3,835 | 4,078 | 4,263 | 4,462 48,160 | | | |
| Total, adjusted | 38,678 | 40,036 | 43,230 | 45,530 | 40,100 | | | |
| | | Percentage | Change | | | | | |
| Eastern Cape | | 3.9 | 7.9 | 3.4 | 4.3 | | | |
| Free State | | 6.6 | 10.3 | 6.6 | 4.5 | | | |
| Gauteng | | 4.4 | 8.3 | 5.8 | 5.9 | | | |
| KwaZulu Natal | | 2.5 | 11.8 | 8 | 5.6 | | | |
| Mpumalanga | | 7.1 | 3.5 | 6.7 | 3.9 | | | |
| Northern Cape | | 2.1 | 7.6 | 5.2 | 5.2 | | | |
| Northern Province | | 1.1 | 6.1 | 7.2 | 6.9 | | | |
| North West | | 6.6 | 6.3 | (2) | 11.1 | | | |
| Western Cape | | .3 | 6.3 | 4.5 | 4.7 | | | |
| Total, adjusted | | 3.5 | 6.3 | 5.3 | 5.8 | | | |

Source: National Treasury (2000:31).

Note: Total provincial spending has been adjusted for certain function shifts.

The critical question is whether the dramatically increased spending since 1994 has moved the education system toward greater degrees of fiscal equity in the experiences of schools and higher education institutions. In gross terms there were major shifts in spending in the early years of the new government, both toward social services as a whole and, within each social sector, a redistribution toward those disadvantaged by apartheid (see Table 5).

However manifest inequalities between schools persist for a number of reasons. First, the sheer extent of the backlogs in apartheid education require a much greater investment than has been achieved through existing levels of budgetary allocation. For example:

- more than a quarter of schools (27.3 percent) still do not have potable water;
- more than two-thirds of schools (35.5 percent) do not have any form of telecommunications, and this could be much worse were it not for the dramatic increase in privately owned cellular phones by principals and teachers;
- more than 45 percent of schools report that they do not have electricity (SRN 2001).

In short, there is not enough money allocated in the budget to reverse the backlogs of education infrastructure inherited from apartheid. As shown below in the analysis of the teacher rationalization program, unanticipated consequences of this policy placed severe restrictions on capital expenditures in the years 1997/98-1999/00, and the gains made in providing basic resources to schools have largely been achieved in the last three years. Nevertheless on the one hand, there is an argument for eliminating inequalities in the provision of these resources to schools over a finite period. On the other hand, there is a case to be made for the view that, if efficiency is not simultaneously improved, increased allocations to schooling will not be effectively utilized. Van der Berg (2002) supports this latter argument by pointing out that a number of historically under-resourced schools are performing as well as the best schools in the country in terms of matriculation pass rates, whereas many historically privileged schools are under-performing relative to their similarly privileged peers. The point is that it is one thing for a school to have resources at its disposal but quite another for it to use the resources effectively. One of the biggest unanswered questions about the South African schooling system concerns the management factors required for the efficient and effective use of resources.

Second, the political agreements that allowed for uncapped parental contributions to schooling has effectively washed out any gains from equity-based funding favoring black schools. In former-white schools, for example, tuition fees (and other associated costs, like hostel fees) have in many cases increased by more than 100 percent since 1994, thereby creating a de facto class-differentiated education system in which mainly white students are able to enjoy access. The impact of private contributions on public schools is the subject of current empirical studies by both the department of education and international agencies like UNESCO. There are several policy options for this problem.

- Cap private spending. The DOE implicitly argues against this option in the Report to the Minister by pointing out that private contributions can be used to cross-subsidize larger state contributions to poor public schools. However the question is: do they make the most of these opportunities for cross-subsidization?
- Reduce public support to schools in proportion to the level of private spending, i.e., a more radical approach than currently provided by the national norms and standards. For example, recently an equity component was added to the post-provisioning process, providing for a skewing of post allocations to poor schools.
- Increased public spending, with increases going to the poorest schools.

Third, the management capacity of provincial education departments to deliver on allocated budgets remains a primary explanation for under-spending on schools in the poorest provinces. Consider, for example, the expenditure on early childhood development (ECD) under a conditional grant of R30 million (Table 8).

Only two provinces spent more than 50 percent of their allocations, even though 100 percent of the amount had been transferred. The reasons given in this case include the lack of staff to implement the ECD project, the low status of ECD in provincial government priorities, delays in the tender process,

⁷ The UNESCO study is being conducted by the Centre for Evaluation and Assessment at the University of Pretoria.

and a range of other capacity-related problems. Such problems are repeated with respect to available donor funding or other conditional grants. The Eastern Cape province, for example, has only spent 28.58 percent of the R39 million available specifically for quality improvement and financial management (Asmal 2002:18). In short, even when the fiscal base for supporting critical initiatives is available, there is no management capacity to implement such programs evenly and expeditiously in the various provinces.

| Table 8 2001/02 Conditional Grant Allocation to and Expenditure by Provincial Departments of Education for Early Childhood Development | | | | | | | |
|---|--------|--------|-------|--------|-------|---------|--|
| Province Allocations Transfers Expenditure As Per Last Report Received | | | | | | | |
| | R'000 | R'000 | R'000 | R'000 | | | |
| Eastern Cape | 3,885 | 3,885 | 11 | 3,874 | .28 | Feb. 02 | |
| Free State | 1,323 | 1,323 | 12 | 1,311 | .91 | Feb. 02 | |
| Gauteng | 2,583 | 2,583 | - | 2,583 | 0 | Dec. 01 | |
| KwaZulu Natal | 4,641 | 4,641 | 2,500 | 2,141 | 53.87 | Jan. 02 | |
| Mpumalanga | 1,533 | 1,533 | | 1,533 | 0 | | |
| Northern Cape | 399 | 399 | 214 | 185 | 53.63 | May 01 | |
| Limpopo | 3,297 | 3,297 | | 3,297 | 0 | Dec. 01 | |
| North West | 1,680 | 1,680 | - | 1,680 | 0 | | |
| Western Cape | 1,659 | 1,659 | 502 | 1,157 | 30.26 | Feb. 02 | |
| Total | 21,000 | 21,000 | 3,239 | 17,761 | 15.42 | | |

Source: Asmal (2002:15).

| Table 9 Education Expenditures by Economic Classification | | | | | | | |
|---|---------|---------------------|---------|----------------|---------|--|--|
| | Actual | Estimated Actual | Med | ium-term Estim | ate | | |
| R million | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03 | | |
| Current expenditure | 38,189 | 39,591 | 42,551 | 44,672 | 47,260 | | |
| Personnel | 35,263 | 36,242 | 38,432 | 40,014 | 42,322 | | |
| Other current | 2,926 | 3,349 | 4,119 | 4,658 | 4,938 | | |
| Capital | 486 | 445 | 679 | 858 | 900 | | |
| Total | 36,678 | 40,036 | 43,230 | 45,530 | 48,160 | | |
| Current expenditure | | | | | | | |
| Personnel | 91.2 | 90.5 | 88.9 | 87.9 | 87.9 | | |
| Other current | 7.6 | 8.4 | 9.5 | 10.2 | 10.3 | | |
| Capital | 1.3 | 1.1 1.6 1.9 1.9 | | | | | |
| Total | 100 | 100 | 100 | 100 | 100 | | |

Source: National Treasury (2000:32)

Fourth, the proportionate size of personnel expenditures in relation to non-personnel costs is very high in all provinces despite the rationalization of teachers in the past six years. Personnel expenditures increased to a peak of 91.2 percent in 1998/99 and then declined and stabilized to a projected 87.9 percent in 2002/03. The medium-term projection is to reduce education costs to 85 percent of total expenditures, thereby creating budgetary power of 15 percent for teacher development, materials expenditures, classroom and school buildings, and other related non-personnel costs. The problem is that in the poorest provinces,⁸ the personnel costs remain in excess of 90 percent in the medium-term expenditure framework (MTEF) years.⁹ In short, the ability of provinces to set in place basic infrastructure remains hampered by the high ratio of personnel to non-personnel expenditures (Table 9). We return to this issue in our second case study on teacher rationalization.

Fifth, the *efficiency* factor in the provinces remains very low. The larger and poorer provinces continue to be plagued by high dropout, repeater, and failure rates. In turn, these inefficiencies increase the costs to budget of maintaining the education system at provincial levels. The flow-through rates illustrate these inefficiencies most starkly. Table 10 shows the rates by race for the years 1982-1993, the year before the advent of democratic government.

| | Flow-thro | Table 10 ugh Rates by 982-1993) | Race | | | | |
|---|---|---------------------------------------|---------------------------|---------------------------|--|--|--|
| Grade and Year | Grade and Year Blacks Whites Coloreds Indians | | | | | | |
| G1 in 1982 G10 in 1991 G12 in 1993 Matric passes | 100 40.4 39 14.1 | 100 91.5 79 70.9 | 100 43.9 25.6 21 | 100 96 73.6 66.7 | | | |

Source: Strauss, Plekker, and Strauss (1993).

Table 11 shows that the average flow-through rates remain low, with some 20 percent of Grade 1 enrollees expected to pass matric 12 years later and less than 5 percent going on to university in the minimum time.

Higher education, too, is characterized by major inefficiencies (Department of Education 2001:21). The average graduation rate at the institutional level was between 6 percent (low end) and 24 percent (high end) in 1998, further distinguished at 17 percent for universities and 10 percent for technikons. In actual student numbers, this means that in 1998 only 89,000 students graduated out of a total enrollment of 608,000 students. Dropout rates—defined as students who do not re-register even though they have incomplete

⁸ These provinces are KwaZulu Natal, the Eastern Cape, Mpumalanga, Limpopo province, and North West.

⁹ The budget operates on a rolling three-year cycle. Thus at any time, the budget for the current financial year may be compared to actual spending in all past years (for which there is accurate data) and to projections for the following two years. The three years in question constitute the MTEF. This practice is intended to provide both stability and continuity to the budget process.

requirements for graduation—are very high. About 20 percent of all under- and post-graduates drop out of higher education each year with the average for first-year students standing at 25 percent (i.e., the system loses about 120,000 students who do not complete their studies). Poor graduation and retention rates, and high dropout rates, represent high wastage of resources. A student dropout rate of 20 percent is calculated to cost R1.3 billion in government subsidies (Department of Education 2001b:21). But the real costs are immeasurable:

These [lost to inefficiencies] funds would go a long way not only in financing the expansion of the higher education system, but also in providing the much-needed funds for redressing the inequities of the past. Moreover, the cost to those who drop out, in terms of the moral and psychological damage associated with failure, is incalculable (Department of Education 2001b:21).

Sixth, not only is efficiency low, so is *effectiveness* of the schooling system. Despite these comparatively high levels of funding (almost 6 percent of GDP), every major cross-national study has placed South Africa very low in the international league tables (see Tables 12, 13, 14, 15a, and 15b).

| Table 11 Flow-through Rates 1993, 1997, and 2001 | | | | | | |
|--|------------------------------------|------------------------------------|-----------------------------------|--|--|--|
| Level | 1982-93 | 1986-97 | 1990-01 | | | |
| Grade 1 Grade 8 Grade 12 Matric pass Matric exemption | 100 56.8 41.3 19.8 5.6 | 100 68.5 44.7 20.6 5.4 | 100 69.9 n/a 19.3 4.7 | | | |

Source: Calculated from Strauss, Plekker, and Strauss (1997; 1998; 2000; 2001).

| | Table 12 Analysis of the Literacy Task at National Level According to the Different Domains, MLA 1999 | | | | | | | | |
|--------------|---|---------------------|-----------------|--------|---------|---------|--|--|--|
| Type of A | Analysis | | Descriptive Ana | alysis | | | | | |
| Level of A | Analysis | | National | | | | | | |
| Result of | Analysis | Number of cases (%) | Mean Score (%) | S.D. | Max (%) | Min (%) | | | |
| Competencies | Literacy (total) | 100 | 48.1 | 21 | 100 | 0 | | | |
| and domain | Word recognition | | 67.7 | 11.9 | 84.6 | 56.4 | | | |
| | Detail content | | 43.4 | 6.2 | 52.1 | 35.7 | | | |
| | Writing skills | | 23.8 | 8.3 | 38.5 | 18.6 | | | |
| | Spelling & | | | | | | | | |
| | grammar | | 47.2 | 2.6 | 49.9 | 44.6 | | | |
| | Info retrieval | | 47.5 | 12.1 | 69.5 | 31.8 | | | |
| | Info provision | | 65.5 | 26 | 87.1 | 34 | | | |

Source: Strauss (1999).

| Table 13 Analysis of the Numeracy Task According to the Different Domains, MLA 1999 | | | | | | | | |
|---|--------------------------------|---------------------|-----------------|--------|---------|---------|--|--|
| Type of A | Analysis | | Descriptive Ana | llysis | | | | |
| Level of A | Analysis | | National | | | | | |
| Result of | Analysis | Number of cases (%) | Mean Score (%) | S.D. | Max (%) | Min (%) | | |
| Competencies and domain | Numeracy (total) Number and | 100 | 30 | 15.7 | 100 | 0 | | |
| and domain | numeration | | 29.8 | 8.5 | 45 | 17.7 | | |
| | Measurement | | 28.6 | 9.5 | 47.2 | 14.1 | | |
| | Geometry/shapes | | 32.2 | 18.3 | 58.5 | 16.1 | | |
| | Everyday stats | | 30 | 11.9 | 42.1 | 18.3 | | |

Source: Strauss (1999).

| Table 14 Analysis of the Life Skills Task at the National Level According to the Different Domains, MLA 1999 | | | | | | | | |
|--|-------------------------------|---------------------|-----------------|-------|---------|---------|--|--|
| Type of A | Analysis | | Descriptive Ana | lysis | | | | |
| Level of A | Analysis | | National | | | | | |
| Result of | Analysis | Number of cases (%) | Mean Score (%) | S.D. | Max (%) | Min (%) | | |
| Competencies | Life skills (total) | 100 | 47.1 | 17 | 96.7 | 0 | | |
| and domain | Health and nutrition | | 42.3 | 14.7 | 67.9 | 22.3 | | |
| | Civic sense | | 52.2 | 10.1 | 69.9 | 33.8 | | |
| | HIV/AIDS | | 46.7 | 4.8 | 52 | 42.8 | | |
| Science and | | | | | | | | |
| | technology 36.4 5.3 43.7 32.5 | | | | | | | |
| | Pre-vocational skills | | 60.7 | .8 | 61.3 | 60.1 | | |

Source: Strauss (1999).

Table 15a **Third International Mathematics and Science Study Repeat: Mathematics Results Years of Formal** Country Average Scale Standard Error Average Score Schooling Age Singapore 604 (6.3)8 14.4 Korea, Rep. of 587 (2.0)8 14.4 8 Chinese Taipei 585 (4.0)14.2 Hong Kong, SAR 582 8 14.2 (4.3)Japan 579 (1.7)8 14.4 8 Belgium (Flemish) 558 (3.3)14.1 Netherlands 540 8 14.2 (7.1)Slovak Republic 534 8 14.3 (4.0)532 8 14.4 Hungary (3.7)8 Canada 531 14.0 (2.5)Slovenia 8 14.8 530 (2.8)Russian Federation 526 7 or 8 14.1 (5.9)Australia 525 (4.8)8 or 9 14.3 Finland 520 (2.7)7 13.8 Czech Republic 520 9 14.4 (4.2)Malaysia 519 (4.4)8 14.4 Bulgaria 511 8 14.8 (5.8)Latvia (LSS) 505 8 14.5 (3.4)**United States** 502 8 14.2 (4.0)England 496 9 14.2 (4.1)8.5 to 9.5 New Zealand 491 (5.2)14.0 Lithuania 482 (4.3)8.5 15.2 479 8 14.0 Italy (3.8)8 Cyprus 476 (1.8)13.8 Romania 472 (5.8)8 14.8 Moldova 469 9 14.4 (3.9)Thailand 467 (5.1)8 14.5 Israel 8 466 14.1 (3.9)Tunisia 448 8 14.8 (2.4)Macedonia, Rep. of 447 8 14.6 (4.2)429 8 14.2 Turkey (4.3)Jordan 428 8 14.0 (3.6)8 Iran, Islamic Rep. 422 (3.4)14.6 Indonesia 8 403 (4.9)14.6 Chile 392 (4.4)8 14.4 7 **Philippines** 345 (6.0)14.1 Morocco 337 (2.6)7 14.2 **South Africa** 275 (6.8)8 15.5 **International Average** 487 (0.7)14.4

Source: Howie (2001).

| Table 15b Third International Mathematics and Science Study Repeat: Science Results | | | | | | | |
|---|---------------|----------------|-----------------|---------|--|--|--|
| Country | Average Scale | Standard Error | Years of Formal | Average | | | |
| | Score | | Schooling | Age | | | |
| Chinese Taipei | 569 | (4.4) | 8 | 14.2 | | | |
| Singapore | 568 | (8.0) | 8 | 14.4 | | | |
| Hungary | 552 | (3.7) | 8 | 14.4 | | | |
| Japan | 550 | (2.2) | 8 | 14.4 | | | |
| Korea, Rep. of | 549 | (2.6) | 8 | 14.4 | | | |
| Netherlands | 545 | (6.9) | 8 | 14.2 | | | |
| Australia | 540 | (4.4) | 8 or 9 | 14.3 | | | |
| Czech Republic | 539 | (4.2) | 9 | 14.4 | | | |
| England | 538 | (4.8) | 9 | 14.2 | | | |
| Finland | 535 | (3.5) | 7 | 13.8 | | | |
| Slovak Republic | 535 | (3.3) | 8 | 14.3 | | | |
| Belgium (Flemish) | 535 | (3.1) | 8 | 14.1 | | | |
| Slovenia | 533 | (3.2) | 8 | 14.8 | | | |
| Canada | 533 | (2.1) | 8 | 14.0 | | | |
| Hong Kong, SAR | 530 | (3.7) | 8 | 14.2 | | | |
| Russian Federation | 529 | (6.4) | 7 or 8 | 14.1 | | | |
| Bulgaria | 518 | (5.4) | 8 | 14.8 | | | |
| United States | 515 | (4.6) | 8 | 14.2 | | | |
| New Zealand | 510 | (4.9) | 8.5 to 9.5 | 14.0 | | | |
| Latvia (LSS) | 503 | (4.8) | 8 | 14.5 | | | |
| Italy | 493 | (3.9) | 8 | 14.0 | | | |
| Malaysia | 492 | (4.4) | 8 | 14.4 | | | |
| Lithuania | 488 | (4.1) | 8.5 | 15.2 | | | |
| Thailand | 482 | (4.0) | 8 | 14.5 | | | |
| Romania | 472 | (5.8) | 8 | 14.8 | | | |
| Israel | 468 | (4.9) | 8 | 14.1 | | | |
| Cyprus | 460 | (2.4) | 8 | 13.8 | | | |
| Moldova | 459 | (4.0) | 9 | 14.4 | | | |
| Macedonia, Rep. of | 458 | (5.2) | 8 | 14.6 | | | |
| Jordan | 450 | (3.8) | 8 | 14.0 | | | |
| Iran, Islamic Rep. | 448 | (3.8) | 8 | 14.6 | | | |
| Indonesia | 435 | (4.5) | 8 | 14.6 | | | |
| Turkey | 433 | (4.3) | 8 | 14.2 | | | |
| Tunisia | 430 | (3.4) | 8 | 14.8 | | | |
| Chile | 420 | (3.7) | 8 | 14.4 | | | |
| Philippines | 345 | (7.5) | 7 | 14.1 | | | |
| Morocco | 323 | (4.3) | 7 | 14.2 | | | |
| South Africa | 243 | (7.8) | 8 | 15.5 | | | |
| International Average | | (0.7) | J | 14.4 | | | |

Source: Howie (2001).

Seventh, the specific policy mechanisms that seek redistributional effects on the education system have not demonstrated impact in the provinces' poorest schools. The formula-based distribution of resources—referred to as the provincial equitable share formula—has a component that is weighted in terms of historical backlogs and high enrollments (a function of the inherited education system in poor provinces). As discussed earlier, the provinces' capacity to mobilize allocated resources and the distracting power of non-personnel expenditures contribute to a very low base of resources for impacting poor schools.

Targeted Funding Through the National Norms and Standards

Another policy mechanism for achieving equity in schools is the National Norms and Standards for School Funding (NNSSF). The logic of this proposal is that schools and their communities are classified on the basis of need and then allocated a proportional percentage of funds from non-personnel expenditures. In short, 60 percent of available recurrent non-personnel resources go to 40 percent of the poorest schools in an education department.

How would this work? The provincial education department would set aside a budget for non-personnel recurrent expenditures in public schools for items like electricity, writing books, textbooks, equipment, and even non-emergency building repairs. The provincial education department would then rank schools according to a poverty index, determined on the basis of school and community conditions. This budget would then be divided among schools according to five quintiles (from poorest to least poor) such that each quintile receives 35 percent, 25 percent, 20 percent, 15 percent, and 5 percent of funding, respectively. The resultant allocations are either transferred as a cash allocation into the schools' bank accounts (so-called Section 21 schools)—based on evidence of financial management capacity—or managed by the provincial department on the basis of budgeted inputs from the schools.

The evidence is clear that despite real increases in the redirection of funding to the poor, these gains were washed out as a result of the following factors:

- the small redistributive base of the norms and standards (recall that the funds available on the nonpersonnel budget are extremely limited because of the high personnel costs);
- the pervasive poverty in school communities meant that the required prioritization list (or the resource targeting index) captured only a small percentage of the poorest schools; in other words, prioritization meant that a large number of destitute schools fell outside of the scale provided for the poorest institutions, appearing in the next level of allocation;
- the differentiated capacity and commitment to redistributive funding across the provinces has in fact increased inter-provincial funding differences, despite the fact that the NSSF actually seeks to reduce inequalities between and within provinces.

In short, the NSSF has ensured that poor students in provinces receive more funding, in real terms, than in a needs-blind policy dispensation. But the design of the policy, the low funding base, the capacity of the provinces, and the co-existence of other policies (like the uncapped parental contribu-

tions from parents) made some schools and communities more vulnerable to financial hardship, increased inter-provincial inequalities, and failed to reduce intra-provincial differences between privileged (former white) and disadvantaged (black) schools. In this regard, a recent consultative study with provincial departments of education concluded that "if this situation persists, sustainability of quality learning and redress might be compromised in the long run" (Wildeman 2001:7; Department of Education 2003).

Case Study

Teacher Rationalization

Context of the Reform

The already-high ratio of personnel expenditures to non-personnel costs described above was significantly increased as a consequence of two policy decisions taken soon after the new government assumed office: the equalization of salary scales for teachers and the equalization of pupil to teacher ratios (National Treasury 1999).

Equalization of Salary Scales

In the 1996/97 financial year, the various salary structures for teachers were merged into a single salary scale. Prior to 1994 teachers in certain homeland administrations were paid less than their counterparts with the same qualifications who were employed by other departments. In effect all salaries were adjusted upward to the scale of the former-white education departments. This resulted in some 40 percent of teachers moving to higher salary brackets. The salaries of females in those departments in which parity had not existed prior to 1994 were also equalized.

Equalization of Pupil to Teacher Ratios

In the same year the Department of Education announced new pupil to teacher ratio norms of 40 to 1 for primary schools and 35 to 1 for secondary schools to be phased in over the period 1996-2000. There was wide disparity in these ratios between provinces at the time, as shown in Table 16, and this measure was introduced in the interests of promoting greater equity between provinces.

| Table 16 Pupil to Teacher Ratios by Province Year 1995 | | | | | | |
|--|--|--|--|--|--|--|
| Province | Primary | Secondary | | | | |
| Eastern Cape Free State Gauteng KwaZulu Natal Mpumalanga North West Northern Cape Limpopo Western Cape | 48.7:1 33.2:1 31.2:1 41.1:1 38.1:1 33.6:1 29.2:1 37.9:1 26.4:1 | 28.4:1 29.9:1 23.9:1 29.8:1 32.7:1 25.1:1 22.9:1 34.6:1 20.6:1 | | | | |

Source: Hansard (1996); Institute of Race Relations (1997).

These figures mask even wider disparities between schools within provinces. Thus although the introduction of the new pupil to teacher norms did not necessitate an increase in the overall numbers of teachers, attempts to equalize the differences resulted in the employment of between 40,000 and 60,000 new teachers countrywide. This arose from the fact that schools who were above the norms hired new teachers, while those below the norm were given five years to reduce their teacher numbers.

The equalization of teacher salaries, together with the establishment of new norms for pupil to teacher ratios, had a very significant effect on spending, raising total education expenditures for the 1996/97 year by 22.1 percent, as shown in Table 17. The bulk of this increase was accounted for by personnel costs, although there were also significant increases on capital and other current items.

| Table 17 Education Expenditures by Item 1995/96-2002/03 | | | | | | | | | |
|---|------------|--------|--------|--------|--------|--------|--------|--------|--------|
| R million 1995/96 1996/97 1997/98 1998/99 1999/00 2000/01 2001/02 2002/03 | | | | | | | | | |
| | Expend | 26,128 | 31,578 | 34,252 | 35,229 | 36,221 | 39,308 | 41,531 | 46,046 |
| Personnel | % of total | 87.2 | 86.3 | 88.8 | 91.1 | 90.9 | 90.9 | 88.6 | 86.7 |
| | % increase | | 20.9 | 8.5 | 2.9 | 2.8 | 8.5 | 5.7 | 10.9 |
| | Expend | 2,623 | 3,437 | 3,272 | 2,372 | 3,148 | 3,243 | 3,976 | 5,205 |
| Other current | % of total | 8.8 | 9.4 | 8.5 | 6.1 | 7.9 | 7.5 | 8.5 | 9.8 |
| | % increase | | 31 | -4.8 | -27.5 | 32.7 | 3 | 22.6 | 30.9 |
| | Expend | 681 | 999 | 507 | 549 | 459 | 672 | 1,382 | 1,851 |
| Capital | % of total | 2.3 | 2.7 | 1.3 | 1.4 | 1.1 | 1.6 | 2.9 | 3.5 |
| - | % increase | | 46.7 | -49.2 | 8.3 | -16.4 | 46.4 | 105.7 | 33.9 |
| Total | Expend | 29,971 | 36,606 | 38,570 | 38,656 | 39,828 | 43,223 | 46,889 | 53,102 |
| | % increase | | 22.1 | 5.4 | .2 | 3 | 8.5 | 8.5 | 13.3 |

Source: Figures for 1995/96-1998/99 are calculated from National Treasury (1999:45); those for 1999/00-2002/03 calculated from National Treasury (2003:52). Figures for all other years are actual.

These increases were not anticipated in the budget, and the provinces did not contribute equally to the budget overruns. The two largest and poorest provinces were the principal contributors: Eastern Cape, where spending increased by a massive 37 percent in 1996/97 and Limpopo (+29 percent). The remaining three of the five largest provinces all recorded increases under the national average, but nevertheless in excess of inflation: KwaZulu Natal (+16 percent), Gauteng (+13 percent), and Western Cape (+20 percent).

In order to gain a greater measure of budgetary control, the three years which followed were times of fiscal austerity for provincial education departments, with budget increases limited to 5.4 percent, .2 percent, and 3 percent, respectively, from 1997/98-1999/00. This discipline was achieved through draconian measures in some provinces. In the Eastern Cape, for example, all financial approvals were routed through the provincial treasury, with the discretion of education officials severely restricted. The measures taken to control expenditures bit deeply into textbook and capital budgets, as shown in decreases in the capital and other current items during this period.

Teacher Rationalization Policy

The teacher rationalization policy was part of the bid to shift 20 percent of overall education spending from the previously better-funded provinces to those which had been relatively neglected. The mechanism was the equalization of pupil to teacher ratios. As outlined above, implementation of the latter was not a smooth process, with an initial sharp increase in teacher numbers and a consequent rise in spending. The aim of the rationalization process was to move teachers from schools in which the ratios exceeded the norms to those with relative teacher shortages; excess teachers who could not be accommodated would be offered voluntary severance packages (VSPs). Initial estimates put the cost at around R600 million. The details of implementation were to be left to the provinces.

Stakeholder Views

In April 1996 a comprehensive agreement was reached between the Department of Education and the three teachers' unions in the Education Labor Relations Council. The agreement included a new salary grading scheme (with increases ranging up to 48 percent and an average increase of 15.7 percent), plans for the rightsizing of teacher numbers, a restructuring of the pension scheme, and improved medical benefits (South African Institute of Race Relations 1997). However, at the provincial level individual unions warned that teachers would need to be consulted before being moved, while locally teachers exhibited a great deal of nervousness.

Privileged schools (the former exclusively white or so-called Model C schools) resisted, objecting to being restricted to hiring new teachers from the list deemed to be in excess at other schools (regardless of those teachers' qualifications and experience). In June 1997 the Grove Primary School in the Western Cape, supported by 80 other schools, took the Minister of Education to court, arguing that the regulations were in conflict with the South African Schools Act of 1996, which empowered the governing bodies of public schools to appoint teachers of their own choice.

Implementation

The practical difficulties of implementing the teacher rationalization plan proved to be far more intractable than envisaged by the policymakers. These problems fell into four main categories: loss of skilled teachers through VSPs, cost, resistance by teachers to redeployment, and resistance by schools to hiring teachers from the excess lists.

In practice all who applied for the package were successful (Hindle Interview 2003), and by April 1997 more than 19,000 teachers had applied for VSPs, with close to 16,000 of these applications having been approved at a total cost of R1.05 billion (South African Institute of Race Relations 1997:156). In total the exercise was successful in moving some 30,000 teachers between schools and in retrenching an equal number (Hindle Interview 2003). However it soon became clear that the majority of those opting for retrenchment were teachers with relatively high levels of skills and experience who were more likely to obtain employment elsewhere. A 1997 survey revealed that most provincial education departments felt that the implementation of the VSPs had drained them of vital skills and experience (South African

Institute of Race Relations 1997:158). The fact that better qualified, more experienced teachers were applying for the package would also explain the process's much higher-than-estimated costs. At the same time, a number of provinces announced that due to budgetary constraints, they would allow temporary teachers' contracts to lapse.

There were some unexpected results in the redeployment of teachers between schools. It might have been expected that this would invariably involve moving teachers from relatively well-resourced schools to those in which poorer working conditions prevailed and that problems of travel to remote areas or dangerous conditions might have caused some teacher resistance. In practice the open school market freed up parental choice, and there was a significant movement of pupils to better schools, allowing these schools to reach the required pupil to teacher ratios without retrenching teachers. When faced with an unpalatable move, teachers from more privileged schools merely opted for the package.

In August 1997 the Cape Town High Court found in favor of the Grove Primary School. Although the Minister was given leave to appeal, the matter was settled out of court. Settlement terms permitted schools to advertise for teachers if no suitable teachers were available on redeployment lists. In December the Minister announced that the national guidelines on redeployment were being abolished, with provinces henceforth deciding on teacher numbers based on their respective budgets.

The latter move led to a long and damaging clash with teachers, but remains the current national policy. In January 1999 the South African Democratic Teachers' Union (SADTU), the largest and most militant of the unions, declared: "The highlight of the year was the May strike, after Minister Sibusiso Bengu declared Regulations 593 and 594 without consulting teacher unions" (Educator's Voice 1999:1). Despite the organized teaching profession taking a strong stance on national standards for pupil to teacher ratios, in 1999 the DOE and the unions signed an agreement on educator rationalization and redeployment, whereby provincial budgets were to be used for determining the overall number of posts available, which would then be distributed to schools on a pro rata basis. The new post provisioning model factored in learner numbers, class size norms, teacher loads, whether more than one language of instruction is used in the school, and the number of pupils with disabilities (National Treasury 2003:62).

Analysis

In analyzing the effects of government efforts to regulate teacher distribution and the policy lessons which these efforts have for the schooling terrain, our conclusions fall into three broad areas:

- Were the aims of the policy met?
- What were the deep structural effects on the supply and deployment of teachers?
- What were the broader systemic implications of the initiative, and how did these link with other strands of the system?

¹⁰ The South African Schools Act of 1996 empowers SGBs to levy school fees and to use these monies, inter alia, for hiring teachers in addition to those provided by the state through the post-provisioning process.

The teacher rationalization program was to equalize pupil to teacher ratios across provinces. Table 18 shows that the ratios for state-paid teachers ¹⁰ increased from 33 to 1 in 1996 to 34.5 to 1 in 2000. However the average deviation increased over this period from 2.7 to 3.1, indicating a higher degree of variability across provinces and hence inequity in 2000 than there was in 1996. When SGB-paid teachers are included, the overall pupil to teacher ratio remained the same between 1996 and 2000. Indeed a very significant feature of this period is the large increase in the numbers of SGB-paid teachers in every province, with a total of 174 percent for the country as a whole. This latter feature would certainly have increased inequities between schools, as SGB-paid teachers will be concentrated in schools which serve more affluent communities and where school fees are relatively high.

| | Table 18 Pupil to Teacher Ratios 1996 and 2000 | | | | | | | | | | | | |
|-----------|--|-----------|------|----------|------|---------|------------|-------------|------|----------|------|----------|------------|
| 1996 2000 | | | | | | | | SGB Teacher | | | | | |
| Province | Pupils | State pd. | P:T | Total | P:T | SGB | Pupils | State pd. | P:T | Total | P:T | SGB | % increase |
| 1 . | | teachers | | teachers | 1 | eachers | | teachers | ; | teachers | | teachers | 96-00 |
| EC | 2,226,408 | 62,204 | 35.8 | 62,773 | 35.5 | 569 | 2,113,387 | 64,240 | 32.9 | 66,702 | 31.7 | 2,462 | 332.7 |
| FS | 785,217 | 24,338 | 32.3 | 24,869 | 31.6 | 531 | 744,627 | 23,071 | 32.3 | 24,305 | 30.6 | 1,234 | 132.4 |
| GT | 1,424,360 | 45,827 | 31.1 | 51,031 | 27.9 | 5,204 | 1,527,698 | 41,171 | 37.1 | 52,568 | 29.1 | 11,397 | 119 |
| KZN | 2,612,235 | 74,004 | 35.3 | 75,723 | 34.5 | 1,719 | 2,646,126 | 70,449 | 37.6 | 77,039 | 34.3 | 6,590 | 283.4 |
| MP | 898,210 | 24,737 | 36.3 | 25,175 | 35.7 | 438 | 857,241 | 20,906 | 41 | 22,179 | 38.7 | 1,273 | 190.6 |
| NC | 199,606 | 7,352 | 27.1 | 7,487 | 26.7 | 135 | 174,497 | 6,364 | 27.4 | 6,798 | 25.7 | 434 | 221.5 |
| LP | 1,902,732 | 56,537 | 33.7 | 57,145 | 33.3 | 608 | 1,722,869 | 54,505 | 31.6 | 55,912 | 30.8 | 1,407 | 131.4 |
| NW | 954,907 | 32,354 | 29.5 | 32,682 | 29.2 | 328 | 896,141 | 29,459 | 30.4 | 30,589 | 29.3 | 1,130 | 244.5 |
| wc | 871,708 | 32,315 | 27 | 33,714 | 25.9 | 1,399 | 916,115 | 25,861 | 35.4 | 29,873 | 30.7 | 4,012 | 186.8 |
| Nat'l | 11,875,380 | 359,668 | 33 | 370,599 | 32 | 10,931 | 11,598,701 | 336,026 | 34.5 | 365,965 | 31.7 | 29,939 | 173.9 |
| Avg. Dev. | | | 2.7 | | 3.2 | | | | 3.1 | | 2.7 | | |

Source: Department of Education (2002). Unfortunately it is not possible to examine trends for the intervening years, as this report gives figures for only 1996 and 2000, and the DOE is unable to supply an authoritative set of figures for the other years.

| Table 19 Per Learner Expenditures (public) 1996-2003 | | | | | | |
|--|---------|------------------|---------|------------------|--|--|
| Province | 1996/97 | Prop. of Average | 2000/01 | Prop. of Average | | |
| EC | 1,913 | 82.4 | 3,362 | 92.6 | | |
| FS | 2,389 | 102.9 | 3,910 | 107.7 | | |
| GT | 3,047 | 131.3 | 4,384 | 120.7 | | |
| KZN | 2,145 | 92.4 | 3,069 | 84.5 | | |
| LP | 2,049 | 88.3 | 3,452 | 95.1 | | |
| MP | 2,109 | 90.9 | 3,287 | 90.5 | | |
| NC | 3,078 | 132.6 | 4,858 | 133.8 | | |
| NW | 2,255 | 97.2 | 4,065 | 112 | | |
| WC | 3,460 | 149.1 | 4,391 | 120.9 | | |
| Average | 2,321 | | 3,631 | | | |
| Avg. deviation | 467.4 | | 508.2 | | | |

Source: South African Institute of Race Relations (1997).

But did these policies result in greater equity? Comparing state expenditures per pupil between 1996 and 2000 (Table 19), there have certainly been relative increases in two of the large poor provinces—EC and LP—and relative decreases in the two most advantaged provinces—GT and WC. However there are anomalies, notably in KZN, where per-pupil spending relative to the national average fell from 92.4 percent in 1996 to 84.5 percent in 2000. The average deviation indicates that on this index too there was more variability across provinces, and hence greater inequity, in 2000 than there was in 1996.

This analysis highlights the central government's difficulties in ensuring that its policies meet their intended goals and, in this case, in ensuring that the equity goals of financial allocation policies have their intended consequences. In large part the problem derives from the autonomy enjoyed by provinces in terms of the cooperative governance arrangements described earlier. The way the budget process works is that the central government notionally allocates amounts for each province, using the equity-share formula which takes account of the population with one weighting according to the proportion of people in the province under the age of 15 and another according to the proportion who receive no medical aid benefits. However the ways in which these allocations are, first, distributed between the sectors-education, health, and welfare-and second, spent within each sector, are entirely at the discretion of the respective provincial legislatures. Both the recently issued Report to the Minister (Department of Education 2003) and the latest report of the Fiscal and Financial Commission (FFC) (FFC 2003) identify this as a problem in achieving government's redistributive intentions. The latter report goes so far as to recommend that social security grants be centrally administered, as provinces "are raiding their health and education budgets, among others, to support funding shortfalls" (FFC 2003). The reason for this phenomenon, according to the FFC, is that provinces fear litigation if they do not meet their obligations with respect to the welfare grants.

Because of the difficulties of ensuring that centrally driven policies meet their goals and do not veer off into unintended consequences, the Department of Education is now considering fine-tuning the funding tools at its disposal (Department of Education 2003). New measures under consideration include the establishment of a set of costed norms—the minimum resources considered adequate for the provision of a certain standard of education, the abolition of school fees for the poorest parents, and a restructuring of the funding norms so that respective quintiles are commensurate across provinces.

Public schooling is a vast enterprise of enormous complexity, depending on its successful delivery for the coordination of the work of hundreds of thousands of individuals situated in thousands of institutions, all enjoying some degree of autonomy but constrained by high levels of interdependence. Successful steering of this enterprise depends, in the first instance, on the careful alignment of a number of policy strands. Thus the success of the highly ambitious new curriculum launched in 1996 was critically dependent on the motivation and capacity of teachers. Yet during the critical first few years of the implementation of C2005, discussed as our third case study below, the profession was experiencing a major destabilization and loss of quality through the teacher rationalization program.

Furthermore the teacher rationalization policy created a hiatus in the normal patterns of supply and demand, and this effect is still being felt (Hindle Interview 2003). This disruption is a direct consequence of the excess teacher problem of 1996 and the subsequent policy of halting new recruitments until all the teachers deemed to be in excess were redeployed or retrenched. This, in turn, resulted in a negative image of teaching as a stable profession, with consequences for new applicants on teacher-education programs and capacity in the institutions providing such programs. These problems were aggravated by the government's decision to locate teacher education in the higher education sector and to close down the 120 teacher colleges. While the latter move was critical to improving teacher quality in the long term, the wisdom of undertaking a major restructuring of the institutions responsible for teacher training in the middle of a curriculum revolution is doubtful.

Most fundamentally, however, all policies need to be budgeted before implementation is considered. The failure to cost the decision to allow schools above the new pupil to teacher ratio norms to hire new teachers immediately, while giving those schools below the norms five years in which to achieve the new standards, was an oversight directly responsible for the crisis which followed and whose aftermath continues to affect the school sector.

Case Study

Curriculum Reform

Context of the Reform

The heart of school reforms since 1994 was the establishment of the comprehensive curriculum project called Curriculum 2005, a progressive model of education based on the principles of outcome-based education. In essence, this curriculum called for a form of learner-centered education which placed the teacher in the role of facilitator. It called for the specification of discrete learning outcomes rather than vague and aimless teaching, and it required continuous, formative assessment rather than the one-off, high-stakes examinations that had become a permanent feature of the South African education system.

The new government's learner-centered curriculum was a direct response to the apartheid curriculum variously described as teacher-centered, authority-driven, content-based, elitist, examination-based, and Eurocentric in orientation. The previous curriculum privileged formal knowledge and encouraged rote learning. It straight-jacketed students for university preparation, not recognizing the diverse interests and pathways actually pursued by the majority of students (Jansen and Christie 1999). C2005, based on a radically different philosophy of education, would counteract this powerful curriculum legacy of apartheid.

Reform Design and Implementation

Based on this analysis, C2005 embraced outcome-based education (OBE) as a model for the new system. There were eight critical cross-field outcomes that applied across learning areas (the old subjects) as intended learning outcomes for all learners. In addition, there were 66 specific outcomes detailing in more precise terms the desirable knowledge, skills, and values for learning. In short, all teaching and learning had to focus on discrete learning outcomes that students should be able to demonstrate after a period of instruction.

Integration became one of the key words in the new lexicon. Blurring the boundaries between school subjects and rooting the school curriculum in the everyday life of the child, it was argued, would dramatically open access to high-status knowledge to the poor and improve the fit between education and the workplace:

South Africa has embarked on transformational OBE. This involves the most radical form of an integrated curriculum ... This ... implies that not only are we integrating across disciplines into Learning Areas but we are integrating across all 8 Learning Areas in all Educational Activities ... The outcome of this form of integration will be a profound transferability of knowledge in real life (Department of Education 1997:29).

Program organizers became an important vehicle for integrating everyday and school knowledge. Thus instead of structuring a lesson around a conceptual issue, such as verb or addition, a program organizer such as transport was to be identified as a central integrating theme and the lesson structured around, say, various forms of transport, while the conceptual issues across a range of subjects would then be incorporated into this theme.

Due to the practical impossibility of directly training all teachers in the GET phase of schooling, the cascade model of teacher training was chosen as the preferred model of preparing district officials and educators in schools for the implementation of the curriculum. Simply put, a core of trainers at higher levels of the system would receive training and take this down through various levels of the education system until groups of teachers at a school were reached with knowledge about this new curriculum.

Political support for the curriculum was strong within the ranks of the ruling party (the African National Congress) and its allies, including the largest teachers' union, SADTU. The position was held, strongly and consistently, that this new curriculum would counter all the described liabilities of apartheid education. In short, there was strong political investment in, and support of, this curriculum. In addition, C2005 was a strongly progressivist curriculum, based on a constructivist epistemology (Taylor and Vinjevold 1999). Thus it struck strong chords in a number of university education faculties. At the same time, criticism of the weaknesses of the curriculum were voiced from within the academic terrain.

Analysis

Since its introduction in January 1998 into all Grade 1 classrooms, the curriculum was heavily criticized in academic and (certain) professional circles for the following reasons:

- a highly inaccessible and complex language;
- the under-preparation of teachers for this complex curriculum;
- the large-scale discrepancies in resources and capacity between the few privileged schools and the large mass of disadvantaged schools with respect to implementation;
- the power of existing curricula, teacher socialization, and the all-pervasive system of examinations and control;
- · the lack of confident and competent teachers to manage the curriculum; and
- the critical lack of a solid learning materials base that supports the pedagogy and philosophy of this progressive curriculum (Jansen and Christie 1999).

Another line of argument took an epistemological perspective. The under-specification of the curriculum content and the priority given to integration was likely to lead to the submergence of conceptual knowledge in the everyday, and thus well-resourced teachers and schools were more likely to implement the curriculum as intended than teachers in poor schools. C2005 could therefore result in an exacerbation of existing inequalities in terms of access to high-level conceptual knowledge (Taylor 2000).

The second Minister of Education recognized these deficiencies in C2005's design and content, and called for a review of the curriculum using a panel of distinguished academics, bureaucrats, and teachers. The Curriculum Review Committee (2000) more or less recounted the problems anticipated in earlier writings but added several additional findings: the curriculum ignored content and the specification of what was to be learned in favor of process; and it was strong on integration of various curriculum parts (horizontal) but was vague about the content demands for progression (vertical) that enable learners to move from one grade to the next. Furthermore evidence was beginning to accumulate that the vagueness of content and the under-specification of basic learning skills actually had a damaging effect on the learning performance and cognitive understandings of learners exposed to the new curriculum, particularly among learners in disadvantaged schools (Curriculum Review Committee 2000).

The Minister then introduced a streamlined curriculum (or thin version of C2005), removing some of the burdensome language architecture and establishing a much simpler and more accessible curriculum framework. Released in 2002, the streamlined curriculum was accompanied by a push for introducing an explicit statement of values into this new reform, a strategy that generated strong political resistance, especially from fundamentalist churches (Jansen 2003). The core values included equity, tolerance, multilingualism, openness, accountability, and social honor.

The question is whether this succession of curriculum reforms—the thick version of C2005, the stream-lined version of C2005, and the values-based version of C2005—are in fact sustainable over time. That is, to what extent are these curriculum reforms deeply ingrained within schools' life, culture, and organization? There is now abundant evidence that in all three versions, the curriculum simply is not sustainable for the following reasons:

- the original C2005 was so complex and alienating from teachers' working conditions and pedagogical commitments that it simply did not alter the classrooms' organization or dominant curriculum;
- the training program was weak and sporadic, and contained a fatal design flaw (the so-called cascade model) that had very little impact on teachers, teaching behaviors, and teacher understandings. Training become information-sharing sessions rather than intensive capacity-building exercises;
- the schools' capacity to implement the curriculum varied considerably across and within provinces, with more than one research report documenting the unintended effect of increasing the gap between highcapacity (mainly white) and low-capacity schools (almost all black).

The streamlined version of C2005 has already run into several problems, 11 detailed below, ahead of the promised implementation in 2002

• The streamlined curriculum has created considerable confusion among teachers at the very point where they are still coming to grips with the original version of C2005 phased in at various grade levels since 1998. That is, before the cycle of curriculum reforms ran its course (through 2005), a revised version of the curriculum has already been introduced.

¹¹ These problems have been identified in various research field experiences of doctoral students, faculty, policymakers, and teachers enrolled at the University of Pretoria, including Stoffels (2002); Sokopo (2002); Bhikha (2002); Lucen (2002); Gallie (2002); and Mokoena (2002).

- The streamlined curriculum often co-exists with both the historical curriculum (NATED 550) and the original C2005 in the schools, adding to confusion about curriculum choices and decision-making.
- The new National Curriculum Statements (NCS) collectively constitute a mixed success in overcoming one of the fundamental design flaws of C2005 in terms of specifying the knowledge content more explicitly. Thus while the NCS for mathematics is clear about the progression standards to be achieved by the end of each grade, the language-assessment standards give teachers little guidance. For example, at Grades 2 and 3, teachers are exhorted to see that each pupil "reads lots of books (both fiction and non-fiction) and familiar rhymes at an appropriate language and reading level" (Department of Education 2001c). Yet it is not clear what is meant by appropriate levels of reading and language. When, for example, is it expected that pupils should be able to write simple paragraphs with sentences of the subject-verb-object type? At what level should subordinate clauses be introduced? What about tenses and direct speech? None of these key progression standards are specified, and it is likely, as with C2005, that the pupils of teachers with poor knowledge resources (training, support materials) will lag behind as their teachers teach to the lowest common denominator, unaware of what is expected of them.
- The streamlined curriculum has been elaborated through additional values content, and this has created further discord among teachers, parents, and communities.
- The streamlined curriculum co-exists with a host of other new policy initiatives that add to both the burden and the confusion that teachers struggle with in their classrooms. In short, the competing and often contradictory policy demands made on teachers generates high levels of confusion and concern among practitioners.
- The streamlined curriculum might be delayed for purposes of implementation for reasons that include the time needed for teacher training and preparation, and potential conflicts with similar policies in the school environment.

It is clear that the *conceptual adequacy* of curriculum reform was a major weakness of the planned change. This was already conceded in the call for curriculum review. The curriculum reform was based on critically flawed assumptions about the following:

- the capacities of teachers to understand and implement this complex and sophisticated curriculum:
- the power and utility of the inherited curriculum with its strong examination or testing orientation and its affirmation of the centrality of the teacher in the classroom; and
- the life-world of the practitioner in which simple, accessible, and attainable reforms are more likely to find resonance with classroom life than reforms holding forth multiple objectives and learning outcomes.

It is further clear that the *resource commitments* to capacitate teachers and schools to implement this reform was lacking. In this regard, a number of other flawed assumptions were evident about:

• the conditions of schools and classrooms to provide the basic infrastructure needed to support the curriculum reform (e.g., reasonable learner to educator ratios);

- the availability of basic learning materials to support the new curriculum (in the absence of new textbooks, a critical learning base for both teachers and learners did not accompany the new curriculum reforms); and
- the training model required to initiate and sustain changes in teacher practices (the cascade model was too short, information-driven, removed from classroom contexts and realities, and thin on substantive content).

It is also clear that the strategic actions taken in the implementation of the new curriculum were flawed.

- The treatment of all schools and classrooms as if they were the same led to de facto privileging of the better established (mainly ex-white) schools. That is, teachers in white schools were able to generate additional learning materials through school-based funds and parental contributions. Teachers in white schools were generally better qualified and therefore able to make some sense of the dense curriculum materials, and middle-class children in these schools had more access to resources to support learning in a curriculum that was based on learner drive and initiative.
- The mobilization of departmental officials (like subject advisors) who themselves were inexperienced in curriculum reform and, with a weak knowledge base in the subjects (or learning areas), did little to strengthen school-based capacity for implementation. It was clear from the start that capacity building among strategic implementers (using experienced teachers) would have generated greater impact and perhaps even sustained the reforms beyond early implementation.
- The lack of thorough baseline studies and the maintenance of national evaluation data sets to
 track the reform process and its implementation encouraged anecdotalism and discouraged in-process curriculum modifications. Moreover, political pressure to demonstrate educational success with
 the department's flagship project to some extent prohibited clear and critical analyses of implementation prior to the curriculum review.

Conclusion

On the "Deep and Wide" of Systemic Reform

There is no question that during the first nine years of its existence, South Africa's first democratic government has made significant advances in the schooling sector. The three educational reform initiatives discussed above provide ample evidence of this. Provision is now more equitably provided than at any time in the country's history. At the same time, taken together, the three case studies offer powerful evidence that a lack of systemic thinking and implementation capacity have been major inhibitions to reaching in full the stated goals of educational reform in post-apartheid South Africa. The challenge for the next decade is to tackle reform at a more fine-grained level in order to maximize benefits down to the pupils in classrooms. This will require three kinds of consideration: integrated, systemic thinking, attention to the key mechanisms of implementation (management systems), and finally systematic monitoring to assess whether the goals are being met or frustrated by unintended consequences.

We define systemic reform as having both a breadth aspect—reaching across the education system to connect key leverage points that affect the education reform goals—and a depth aspect—reaching down the education system to ensure deep and sustainable change in the government's education reform initiatives.

Our thesis is that education is a systemic enterprise that can only be improved on any real scale by means of efforts that target strategic points at different levels of the education system. In the case of schools, this means "aligning the many components of the schooling system so as to impact maximally on learner performance" (Taylor, Muller, and Vinjevold 2003:21).

Michael Fullan (1999) uses the concept of deep change to characterize those features of social reforms that seek abiding effects within a social system-like education (see also Fullan 1991; 1993). It means that practitioners construct deep and sophisticated meanings of reforms rather than thin or superficial understandings of the reform project. Deep change involves altering the underlying assumptions, goals, and beliefs that underpin prevailing behaviors that constitute the focus of social change. Deep change agentry implies that participants in the reform process see themselves as active constructors of change rather than passive victims of top-down reform processes (Bhikha 2002). Superficial change, on the other hand, is change that is mechanical, incremental, transient or, quite simply, non-existent, i.e., changes in the surface features of human or organizational behavior that do not disturb what Seymour Sarason once called "the behavioral and programmatic regularities of the school" (Sarason 1996:95). Our case studies—especially with respect to curriculum reforms—suggest that such a deep understanding of the meaning of reform and its careful insertion into the daily routines of schools and classrooms were simply not achieved. Nor have the fiscal equity measures yet really penetrated the daily functioning of schools so as to make a meaningful impact on the core concerns of equity, quality, and efficiency.

Analysis of Education Reform Initiatives

As the three interventions demonstrate, the achievement of educational reform has been limited by a lack of wide systemic thinking. The fiscal equity reforms have had limited impact largely because of the multiple nature of initiatives targeting school-level equity, the uncoordinated nature of these initiatives, and the often conflicting logic of the different initiatives. On the one hand, the norms and standards sought to level the playing field across former-white and black schools with respect to equity and, on the other hand, the unrestricted capacity of former-white schools to leverage private funds from middle and upper-middle class communities has simply accentuated the differences between black and former-white schools. The differences among the nine provinces—including management capacity to spend allocated funds—have not been adequately factored into the strategy for achieving fiscal equity. And the very mechanisms to monitor the achievement of equity are themselves fractured and disconnected. As the recent national Review of the Financing, Resourcing, and Costs of Education in Public Schools found: "The performance monitoring mechanisms in the South African schooling system are currently inadequate to provide a balanced picture of what the learner performance trends are at the various points in the schooling system" (Department of Education 2003:102, emphasis added).

Similarly, the curriculum reforms lacked systemic focus in several ways. First, it did not link together tightly the different training levels in the cascade model so that the dilution of the development message created real problems with respect to what teachers were required to do in the classroom context (Jansen and Christie 1999). Second, it did not provide differential and appropriate levels of intervention and support for schools with vastly different capacities and orientations toward the new curriculum. All schools were treated in the same way, irrespective of the resources and expertise levels. Third, it did not demonstrate adequately how the new curriculum would take account of the powerful legacy and orientations of the old curriculum. Worse, in many cases teachers gained the impression that they were starting from scratch. This lack of systemic integration was again manifested with what was earlier described as the revised or streamlined version of the new curriculum. In short, the inability to strongly align the new curriculum with resources, capacity, and contexts stands at the heart of the weak impact of this important project of the apartheid state.

But the lessons learned in the South African context are not only about the interconnectedness that system-wide thinking offers education reform. It also concerns that lack of system-deep thinking in the three reform initiatives under discussion. There is now sufficient evidence that the significant growth in education expenditures did not necessarily impact deeply on the forms of teaching and learning in schools and classrooms. In other words, the fiscal equity reforms did not alter the basic ways in which provinces operate or schools function, and there is no evidence that they had any beneficial impact on pupil learning. Indeed there is every indication that basic education in South Africa remains one of the most inefficient and ineffective in Africa, despite the disproportionate per-capita amounts spent on South African pupils (Department of Education 2003). The resources did not go deep enough to make a difference in that fundamental object of the new curriculum—quality learning. In relation to fiscal initiatives, this study showed that there was simply not enough money available at the school-level to translate into improved learning performance. The earlier discussion also demonstrated that the na-

ture, quality, and intensity of center-based, cascade-type training simply did not carry over into the deep structures of schooling. The attempts to build the capacity of teachers were, moreover, too far removed from the day-to-day routines and behaviors of teachers and managers in the school context. While there were clearly changes recorded, they tended to be visible in the external behaviors of teachers, rather than in subject-knowledge gains among learners.

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