Report to the Minister

A review of the financing, resourcing and costs of education in public schools

3 March 2003

DEPARTMENT OF EDUCATION

Message from the Minister

I am pleased to release this report, compiled by the Department of Education, on the *Review of The Financing, Resourcing and Costs of Education in Public Schools*.

Almost nine years to the day we claimed freedom in our country. In the nine years since 1994, we have made gains in reducing inequality in education resourcing between provinces, equalising the distribution of teachers in all schools in our country, and improving the efficiency and the flow of public resources, including teachers, towards poor learners. This review shows the improvements that we have made in our procurement, financial, planning and management systems are paying off, but many challenges remain.

I commissioned this review because of my concern at the conditions of degradation at schools, persistent backlogs in infrastructure development and maintenance, and inadequate allocations to some schools for teaching and learning materials. In addition, my colleagues and I were concerned at the increasing costs of education related to transport, textbooks, uniforms and other educational materials. It has also become clear that the full and equal enjoyment of all rights and freedoms is not a reality for a large number of our people. Some young people are deliberately or indirectly excluded from quality schooling in our country. Such exclusions (for reasons related mainly to lack of private resources) blatantly disregard the provisions of our Constitution and our education policies and legislation. These exclusions echo the discriminatory practices which far too many of us experienced in the Apartheid years, and which we will eradicate from our system.

This report reflects the extensive work, conducted over a period of two months, of managers, researchers and planners in the Department of Education. It is a tribute to the sustained investment by this government in public sector capacity, and education planning capacity in particular, that a comprehensive review of funding mechanisms and costs related to public schooling could be finalised in such a short period of time.

This report lays out proposals for dealing with the challenges we must address in our system. The recommendations of the review are practical and based on rigorous analyses and investigations of the situation at school, provincial and national level. The proposals contained in the report address the adequacy of funding of poor learners in the system; suggest a reprioritisation of resourcing procedures and practices in the national and provincial system in a focused way; and propose coherent management and systemic interventions which, if implemented vigorously, will make a difference to the schooling experience of many learners in our country. Proposals are also made to reduce the burden of the costs associated with schooling borne by poorer households and families in South Africa.

We have allowed a lengthy period for public comment to enable us to extensively consult with key partners in the education and social development community. I encourage all interested parties and members of the public at large to engage actively with the report and to submit their comments to the Department of Education. The feedback received from these consultations and public comments will be carefully considered before I finalise my decisions on the recommendations of the *Review of The Financing, Resourcing and Costs of Education in Public Schools.*

I am confident that this report will help us to establish efficient high quality public education institutions which will serve the needs of all South Africans. The final set of recommendations will serve as a key instrument in shaping the measures we will take to respond to the President's injunction to push back the frontiers of poverty in South Africa.

Professor Kader Asmal, MP
Minister of Education

Introduction by the Director-General

It brings me great pleasure to present this report to the Minister of Education, Professor Kader Asmal, MP. I am pleased that we were able to deliver on the Minister's directive to conduct this comprehensive review on a matter of grave importance to our country.

This report on *the Review of the Financing, Resourcing and Costs of Education in Public Schools* presents a situational analysis of the resourcing of education in public schools and makes recommendations for improving the efficacy and outcomes of education resourcing policies for public schools in South Africa. These recommendations are the product of data and information gathered extensively on the schooling experience of learners in different strata of society, the practical experience of officials and managers involved in planning and resourcing of public schools, and the experiences of a broad spectrum of parents and governing bodies concerned about the pressures experienced by learners in the public schooling system, especially the poorest and most disadvantaged learners.

The report presents a series of proposals on how to deal with the resourcing challenges that we face in the public education system. Many of these problems are due to historical patterns of underinvestment and underdevelopment and the report proposes remedies which range from fine-tuning existing interventions to prioritising key interventions and new innovative arrangements for ensuring sustained resourcing at school level, particularly for the poorest learners.

My brief to the Department of Education officials involved in the production of this report was that they should capture in a concise and coherent manner the many valuable debates and ideas on resourcing that have arisen in the various meetings and fora involving national and provincial managers and planners, public finance and education resourcing specialists. In carrying out the review, it was inevitable that more questions on private and public education resourcing would be raised, and my brief stated that areas for further work and investigation and issues for further debate should be highlighted.

However, when the report is finalised after careful scrutiny by the various stakeholders, I believe we will have reached a milestone in our efforts to bring about a more efficient and equitable schooling system. The report will then serve as an invaluable guide that will bring greater coherence and improved prioritisation into the work that lies ahead. In conjunction with the other strategic priorities for education, captured in the strategic plan of the Department of Education, I believe that we are proceeding decisively and boldly towards responding to the President's injunction to push back the frontiers of poverty in South Africa.

We have received positive feedback and valuable inputs from the expert reference team and from a wide cross-section of the public. Our colleagues in the Provincial Education Departments offered us valuable cooperation within very tight timeframes, despite their own demanding schedules. I wish to thank all of these people, without whose unselfish assistance this project would have been impossible to complete.

TD Mseleku
Director-General: Department of Education

Call for comment

MINISTRY OF EDUCATION
TO INVITE COMMENT FROM THE PUBLIC AND INTERESTED PARTIES ON THE REVIEW OF THE FINANCING, RESOURCING AND COSTS OF EDUCATION IN PUBLIC SCHOOLS, CONDUCTED BY THE DEPARTMENT OF EDUCATION

1. The Minister of Education, Professor Kader Asmal, MP, hereby invites comment from the public and interested parties on the findings and recommendations contained in the Report on the *Review of the Financing, Resourcing and Costs of Education*.
2. The report and comments will be part of a process that may influence policy amendments.
3. All comments should be in writing and must reach the Department of Education no later than 21 April 2003.
4. Written comments, which should indicate the name and postal, e-mail and telephone contact details (if available) of the person, governing body or organisation submitting the comments, may be sent to:

   Mr Thami Mseleku
   Director-General: Education
   Attention: Ms E Lubbe

   By post: Department of Education
   Private Bag X895
   Pretoria
   0001

   By fax: (012) 312 5227

   By e-mail: lubbe.e@doe.gov.za

5. An electronic version of the report is available on the Department of Education website (**http://education.pwv.gov.za**, in the "News:" box).
6. This report will also be published in the Government Gazette of 7 March 2003.
7. Anyone who would want to obtain a copy of the report in Sepedi, isiZulu or Tshivenda should indicate this to Mrs Lubbe (contact details indicated above) within 14 days of the date of publication of this notice.

Prof. Kader Asmal (MP)
Minister of Education

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Introduction

1.1 Purpose of the Report

To improve aspects of resourcing of education

This Report is intended to stimulate and guide constructive discussion across Government structures, in public schools and in society at large with regard to the resourcing of public schools in South Africa. The contents of the Report include rigorous analysis of available baseline data, scenarios for improving the resourcing of the schooling system, and innovative 'outside the box' ideas. The Department of Education has made use of a wide range of sources in compiling the Report. Government and non-Government data was used, as well as documents produced by a range of organisations. The Report also captures much of the current thinking in the planning units of the ten departments of education.

1.2 The Government planning and reporting context

Although this Report is extraordinary, in the sense that it is not a product of any established annual planning or reporting process, it is guided by the frameworks and vision of Tirisano, the DoE's strategic plan, and the emerging strategic planning frameworks applicable to Government as a whole. Public comment on this Report will in turn be fed into the regular planning cycles of the departments of education.

1.3 Background to the Report

Escalating costs of education

The Minister of Education made a commitment in 2002 to review the funding of public schools as a result of his concern about reports from parents pointing to an escalation in the costs of education, especially for those parents and households already facing financial hardship. The Department of Education has honoured this commitment by gathering in this Report the available analyses, some of which were being done anyway, and some of which were commissioned in direct response to the Minister's commitment. Flowing from the overall analysis, the Department of Education makes a number of recommendations in the Report, ranging from recommendations that imply the strengthening of current initiatives, to recommendations that imply radical departures from current practice.

1.4 Methodology of the Report

Sources of data

The Planning and Monitoring Branch began with an audit of the available research and data both inside and outside Government. Considerable research and data was found to be available. The following existing

sources were particularly important (see the References section of the Report for more details):

- Comprehensive provincial expenditure and budget data with important analyses thereof, from various National Treasury publications and reports.
- Data on infrastructure, equipment and personnel in schools, from the School Register of Needs and the Annual Survey of Schools data.
- Data with analysis of school circumstances, and likely linkages to learner performance, from the 2001 Systemic Evaluation, which covered a national random sample of some 50,000 learners. This study included data on opinions and level of satisfaction of respondents.
- Data and analysis of household expenditure, including household expenditure on education items, from StatsSA's 2000 Income and Expenditure Survey.
- Comparative data and analysis of learner performance in various Southern and East African countries, from SACMEQ's primary school monitoring programme.

Additional data

Certain gaps were filled through new data collection and/or analysis, commissioned specifically for the completion of the Report.

- An in-depth analysis of existing school data to determine levels of inequity in the system was commissioned, and was completed early in 2003.
- A special survey into school resourcing, involving the collection of data from a random stratified sample of 78 schools in five provinces, was conducted early in 2003 to deal with a lack of data around procurement processes, recent experiences around the adequacy of the school allocations, and prices of goods.
- An analysis of the media's coverage of school resourcing issues was commissioned.

Preparations were made for a study into the textbook market and the optimality of textbook prices, in the hope that findings would be available in time for the release of the Report. This was unfortunately not possible, owing to the tight timeframes. However, the study is going ahead, and findings will be fed into the process at some future point.

Reference Group

Putting together the Report involved consultation within the DoE, between the DoE and PEDs, and between the DoE and the National Treasury. In the consultation process, knowledge and experiences were

shared, and relevant data was presented by a core team from the Planning and Monitoring Branch of the DoE. Consultation also occurred with a Reference Group that included prominent economists and managers from inside and outside Government (Reference Group members are listed at the end of the Report).

1.5 The transformation framework

Conceptual framework

The producers of the Report are informed by a framework of how change happens in our schooling system, and of what the fundamental choices are in the transformation process. This framework reflects both Government policy and practical lessons learnt from our post-1994 experiences in transforming the schooling system. The following sections outline key aspects of the conceptual framework that guides this Report.

1.5.1 The importance of systems

National democratic transformation turns out to be highly complex, and depends not only on the right overall policy choices, but also on the support from a host of systems, from big Government administrative systems, down to local systems of decision-making and information processing at schools. These systems interact with a complex society, with varying and interlocking democratic interests. Touching or changing one part of the system often has unforeseen consequences somewhere else in the system. Any consideration of improvements to the schooling system must include an assessment of how support systems will be managed, from the national down to the school level, and how all the various parts interlock.

Understanding capacity problems

It is common to refer to 'capacity problems' in the bureaucracy. But what may seem like a lack of capacity in individuals is often really a lack of proper systems. There are many committed school principals and circuit managers who are not able to accomplish even half of their potential, owing to a lack of the necessary systems. In education, South Africa has amongst the best informed and most progressive policies in the world. These policies lay an important basis for the systems we need. However, there has been inadequate translation of the 'big policies' into operational policy or into the rules and regulations and processes required for the proper day-to-day functioning of an effective schooling system. Many of our systems are cumbersome and waste time and effort.

1.5.2 Policy design and policy implementation

Strategy versus operations

In this report we take care to separate problems caused by policy mistakes from problems caused by inappropriate implementation. Implementation problems arise when the policy has been misunderstood by managers at the various levels of the departments, or at the school, perhaps because of insufficient explanation and socialisation from the DoE and the PEDs. The remedy may then be awareness campaigns, or a rewording, though not a redesign, of the policy. It might also happen

that essentially sound policies have been insufficiently funded, or that the subdivision of existing budgets between the various types of inputs has not been optimal. On the other hand, certain aspects of policy as such may need review, as policies may have been designed under the extreme pressure of redesigning a whole society, and with very poor data at that. By that same reasoning it is important that if improvements are made on the policies themselves, these should be driven by the better data and the more time for careful reasoning that we now have, so that we do not make more, perhaps worse, mistakes in fixing earlier ones.

1.5.3 Our responsibility to future generations

Our policies are progressive

Narrow sectoral interests, and trends in the media's focus on particular issues, are powerful forces in society, and have to be minded, but cannot be allowed to bias government's need to take an all-encompassing and public-interest view of the issues. *Tirisano* and the host of detailed plans that underpin *Tirisano* at the national and provincial levels are sound plans, though obviously never perfect and continually subject to improvement. Maintaining our focus on these plans, and on the budgeting processes that resource them, is necessary if we want to avoid a piecemeal approach to education transformation that is driven by interest groups.

What we do today has consequences years from now

Education is intrinsically a long-range project. Even if we are able to reorganise the system in a relatively short space of time, the dividends of significant improvements in outputs, i.e. learner performance, are often painfully slow in coming. Rather than discourage us, this should motivate us to fine-tune our current efforts so that returns five, ten or twenty years from now are maximised. Very often solutions to short-term and long-term pressures complement each other. However, where they clash, it is important for us to weigh up the options very carefully.

Knowledge is indesructible

The long-term nature of the project does not undermine its importance. Education is arguably a society's most powerful transformation lever. Economists have estimated that, in developing countries, some 60% of the national wealth is the knowledge and skills embodied in individuals and institutions. In developed countries this rises to perhaps 75%. And, this wealth is indestructible. This is why, after having much of their physical infrastructure essentially destroyed during the Second World War, countries such as Germany were back to pre-war income and welfare levels soon after the end of the war. Assuming South Africa is at the 65% level (somewhere between the 60% of developing countries and the 75% of developed countries), simple arithmetic shows that, if our physical wealth is growing at a rate as high as 5%, but our education wealth is not growing, our total wealth will grow at only about 1,8%.

There are other reasons why education is such a powerful lever. It is one of the few social investments that have a measurable, and measured, rate of financial return. This rate has been estimated at somewhere

between 10% and 25% for someone getting high-quality education in South Africa. It is also a relatively certain investment. Physical wealth, and even wealth in the form of health, can be destroyed by personal and national circumstance and accident. Education cannot. If someone is healthy at age 25, it is hard to forecast whether he or she will be healthy – and productive – at age 50, but if someone is well-educated at age 25, it is quite likely that he or she will still be educated – and productive – at age 50. An educated people will generally not fall into education crises, except in allegorical terms, whereas true, non-allegorical, national health crises are sadly all too common. Unlike natural wealth, education wealth is flexible. Natural wealth exists in limited and fixed amounts, and locks societies into dividing that fixed amount. But education is a form of wealth distribution can be improved only by further educating those who have not been educated in the past. Opportunities for providing education for the underprovided can simply be created – and *must* simply be created - because it cannot be taken from those who have it, whereas we cannot create more land, or gold. For all these reasons, expanding our education, and expanding it by redistributing it better, is the key to our future. If we fail at this, we will fail at building the nation. One way in which we may fail is by concentrating on the wrong things. Much of the data analysis shows that most children essentially do access the schools, and that the numbers of youth who attend school essentially match the total population. We may be only a few percentage points short of the ideal, and we have a problem with age mismatch and repetition, but the raw numbers are basically there. The problem is that the quality of the education that the enrolled youth receive, is, on average, quite low, and, worse, very unequally distributed. We now know that the distribution of knowledge wealth in our youth is at best a little better, but maybe worse, than the distribution of their parents' income. This is a major challenge for our nation. There are two ways of improving this situation. First, by improving the distribution of resources for schooling. Second, and probably more important at this point, by improving the managerial capacity to use those resources well. We have made huge, measurable and measured progress in this area in the past eight years – as much as 60% improvement in some areas, as we will note below. At this point the distribution of resources is much better, two or three times better, than the distribution of results. We must tacklethe remaining task of improving on resource equality (and going on to stronger pro-poor allocation), but we must now really concentrate on, and intensify many-fold, the battle for generating more equality of quality and more equality of learning outcomes, by improving our use of resources in service delivery.

If we fail at providing education, we fail at building the nation

Huge progress made

1.5.4 Supply-driven versus demand-driven service delivery

Despite the enormous changes since 1994, many of the basic paradigms that define schooling in South Africa remain unchanged. It is important for us to think 'outside the box' and to explore fundamental changes, in the long run, in the way schooling happens. Even if certain options are

Out of the box thinking

currently impractical, this does not mean that they will not be practical at some point in the future. It is important for the debates to be kept alive.

Communities have the power

SASA embodies a shift from supply-driven service delivery in schooling, where Government decides on how service delivery takes place, to a more demand-driven mode, where local communities gain a greater say in how they would like the service delivery that they receive, to be structured. This shift, if well managed, carries enormous benefits in terms of economic efficiency and the welfare of communities. Importantly, it is not a shift that implies moving the burden of financing from the central state to local communities. It is about giving local communities an increasing say in how the state funds that they would receive anyway, are spent.

Transformation is non-negotiable

There are a number of ways in which the move from a supply-driven to a more demand-driven schooling system can take place, and each way has its particular risks and benefits. This Report will not explicitly deal with any major long-range changes of this nature. However, the analysis is informed by the awareness that there are many different ways of getting schooling done. What is a non-negotiable is the transformation of our society through an improved schooling system, not the particular mode of delivery that we employ in achieving this.

1.6 Structure of the Report

The main body of the Report, containing situational analyses and the exploration of solutions, is divided into ten sections. These ten sections were defined to correspond to the way in which the schooling system works, the various inputs required by schools, and issues as they are understood in public debate. This rather eclectic approach to the structuring of the Report seemed best if we were to cover all key issues and do so in a way that was meaningful to the Report's intended range of readers. It does mean, however, that there are matters that could have fitted under more than one of the ten headings.

Ten main sections

The ten sections take us from (1) an analysis of the budgeting trail from the national level down to school level, to (2) a discussion of the major personnel input. Thereafter, we focus our attention on (3) the conversion of non-personnel recurrent allocations in line with the National Norms and Standards for School Funding into resources for the school, (4) the issues around the prices of these resources, and (5) the preservation of these resources in the school. The following section deals with (6) the cross-cutting matter of respect for the rights of the poor in the system. Another section focuses specifically on (7) school nutrition. A lengthy section (8), entitled "the National Norms and Standards for School Funding" looks at the way in which school allocations are determined and, closely linked to this, pressures on schools and households in terms of school fees and other private inputs. The next section deals with (9) physical infrastructure. Finally, the key question (10) of how education

inputs are translated into learner performance in South Africa is dealt with.

The space devoted to each issue in the Report should not be regarded as a reflection of the relative importance of that issue. Where sections are longer, this is often because of the availability of new data or analyses relating to the topic. Instead, the relative importance of each issue is stated, explicitly or implicitly, within the analysis itself.

2

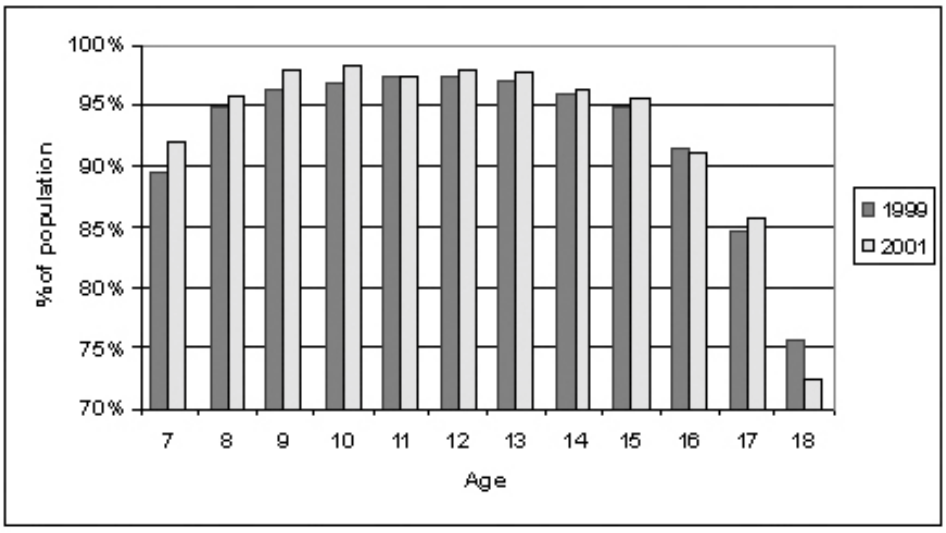
Improvements in access, funding and equity

2.1 Improved access to schooling

Improvements to the NER

Access to schooling for children aged 7 to 15 has improved noticeably since 1994, largely through a major increase in enrolment in public schools. In 1991, the net enrolment rate (NER) for primary schools was 92%. By 1999, this figure had improved to 95%, and by 2001, to 97%. The NER is the number of enrolled learners of particular age groups (ages 7 to 13 for primary schools) divided by the total population of those same age cohorts. The following graph breaks up the NERs for 1999 and 2001 into age-specific enrolment rates (ASERs). What can be seen, is that improvements between 1999 and 2001 occurred in respect of ages 7 to 10 and ages 12 to 15, in other words, nearly all the compulsory school ages.

Figure 1: Age-specific enrolment rates 1999-2001[1]



100% access is the target

Although South Africa's school participation rates are impressive by developing country standards, we still face the challenge of meeting government's objective, namely, to have 100% coverage in the compulsory ages. The 2001 NER of 97% implies that some 300,000 children aged 7 to 15 are not in any institutions. (Whilst home schooling is allowed in South Africa, its extent is so small that we can ignore it for

[1] Source is the 1999 October Household Survey and 2001 Labour Force Survey, both run by StatsSA. Each bar represents the percentage of population of a particular age attending any educational institution.

the purposes of this discussion.) Many of these 300,000 potential learners are outside the system because of a disability. Tackling social marginalisation in this regard, and building the capacity of the schooling system to cater fully for the whole range of learning needs, are the focus of the 2001 Education White Paper 6 on Inclusive Education.

Post-compulsory pre-tertiary participation requires attention

Another problem reflected in the graph is falling participation rates in the FET band. Ages 16 and 18 both experienced a decline in the ASER over the period 1999 to 2001. The overall NER for secondary schools dropped slightly, from 89% to 88%. This is partly linked to the problem that some Grade 11 learners are discouraged from continuing with their schooling if it is suspected that they will not pass the Matric examinations. Whilst FET is not a part of basic education, and the state is therefore not obliged to ensure universal enrolment, these declines are viewed as unacceptable and contrary to the strategic objectives of government. This matter is, therefore, receiving the attention of the DoE.

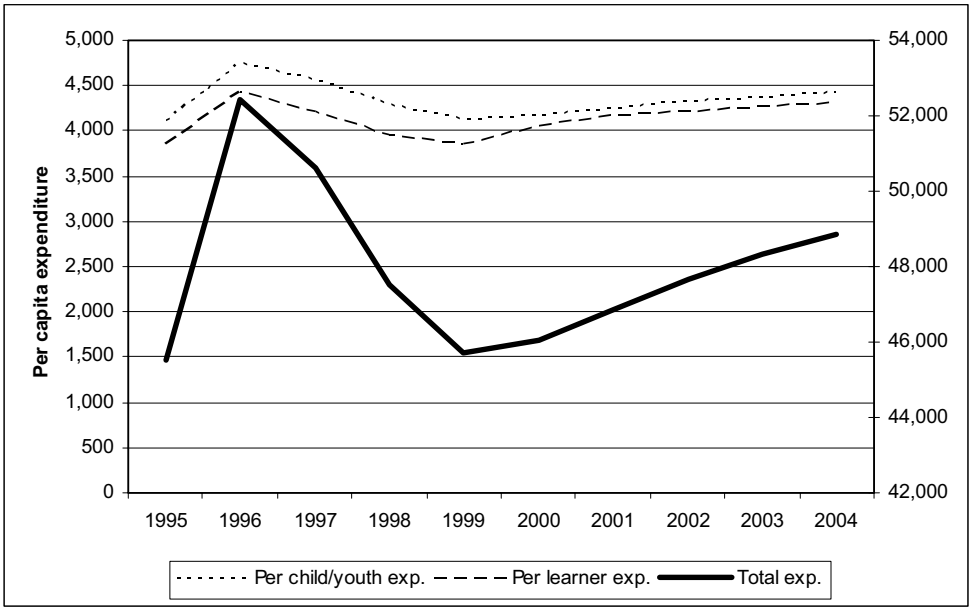
2.2 Improved public funding of education at provincial level

The state has succeeded in extending education service delivery to a greater number of learners, and to a greater proportion of the school-aged population, since 1994. It is important to note that this has not occurred at the cost of lower per learner expenditure, as has happened in many other education systems throughout the world.

Success story

The following graph indicates the trends since 1995. The sudden surge in expenditure in 1996, and the subsequent decline between 1996 and 1999, should be viewed in the light of the exceptional personnel and, specifically, salary pressures that occurred at the time, and the subsequent personnel rationalisation that took place. If we discount the 1996-1998 bulge as an exceptional deviation in the overall trend, we see that the 1995 expenditure level, which translated into just under R4,000 per learner (in 2001 rand terms), improved constantly from 1999 through to 2002. MTEF budgets indicate that this improvement will continue through to 2004 and beyond. The 1999 to 2004 upward trend in total expenditure illustrated by the graph represents an average annual growth rate in real terms of 1.3%. This has helped provide the essential space needed by the DoE and PEDs to launch new quality enhancement and poverty alleviation interventions.

Figure 2: Real trend in global provincial education expenditure (2001 rands)[2]



2.3 Greater equity in the provision of inputs

The poor are getting more

Our system has become far more equitable since 1994, because of a shift of budgets towards the poorer provinces. This shifting of budgets has been responsible for a reduction in a key index of inequality by some 60%. A value of 0.29 in this index of inequality in 1995 had been reduced to 0.10 by 2001. At this point the distribution of resources in education has an inequality index of approximately 0.15, at worst, whereas the distribution of income has an inequality index of approximately 0.60. The fact that education resource distribution is much more equal than income distribution means that public education expenditure is a powerful income equaliser. To realise this, one has to think only that there are many families in this country whose income is in the region of R15,000 per year. If a family with an income of R15,000 has two children at school, and each child represents an expenditure of R5,000 (to use round numbers close to the actual numbers) then the resources transferred into that family by the education sector, alone, are equivalent to 67% of income. The percentage is much higher if we add resources transferred to the poor through health and social development expenditure. Naturally, the 'income' transferred by education cannot be used for other things. But it has a powerful impact, both in the present and in increasing opportunities for the future.

Progressive transfers to poor schools

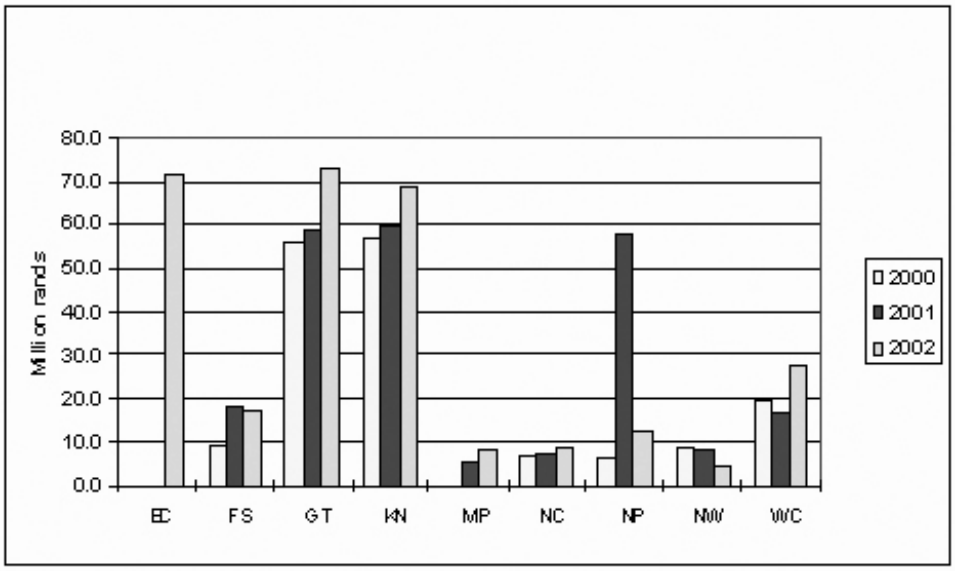
The introduction in 2000 of pro-poor school funding will have an even greater impact, as it is oriented at the more discretionary types of expenditure that can make a quality difference. the use of simple equality indexes to track improvement will now start to be problematic, because

[2] The values for the total expenditure curve are on the right-hand side of the graph. The denominator for the 'Per child/youth expenditure' curve is population aged 6 to 17. The fact that this curve lies above the per learner curve is indicative of the problem of over- and under-aged enrolment in the schooling system.

the system will move in the direction of increasing inequality, but in favour of the poor. But we can say that pro-poor funding brings about more *equity* in schools. The resource targeting list (RTL) which is prescribed by the National Norms and Standards for School Funding and which ranks schools according to poverty, is now used to effect expenditure redress in both the non-personnel recurrent and personnel areas. Currently, despite the low level of school allocations, about R300m is transferred from the non-poor to the poor (that is, the net amount transferred to the poor in addition to the normal proportion of public funding) on an annual basis in terms of non-personnel recurrent expenditure alone. This is set to increase even further as school allocations improve.

Up to 2002 these pro-poor Norms were used only for non-personnel, non-capital expenditure. But, starting in 2003, the post provisioning norms, which allocate educators to schools, will also be driven by pro-poor allocations. Capital spending on physical infrastructure is strongly targeted to the poor already. This will imply a net transfer of about R400m from non-poor to poor, and this figure, too, is set to rise in real terms as the policy is fully implemented. In addition, the post provisioning norms redistribute towards the poor as a result of curriculum redress, involving amongst other things, the introduction of more teacher-intensive curriculum offerings in poor schools. The following graph shows total non-personnel recurrent transfers towards the poor arising out of the implementation of the National Norms and Standards for School Funding. The extent of redress is unevenly spread across the provinces, but on the whole there is a trend towards greater pro-poor transfers in real terms.

Figure 3: Total pro-poor transfer of non-personnel funds via RTL (2001 rands)[3]



Inequality still a concern

A 2003 study of inequality in the schooling system indicates that many indicators display greater intra-provincial than inter-provincial inequality. This is particularly the case with regard to physical infrastructure and equipment. It can be regarded as normal for certain indicators to display more intra-provincial than inter-provincial inequality, for instance we would expect more variation in Matric results within a province than between provinces. However, the continued existence of intra-provincial inequality is a concern, and should inform any attempts to effect more pro-poor inter-provincial redistribution. If more resources are shifted from relatively richer to relatively poorer provinces, it is imperative that the PEDs have in place the necessary mechanisms to make sure that these transferred resources reach the poor in the receiving province, in other words, inter-provincial transfers should directly address the problem of *intra*-provincial inequality.

What about equity of outputs?

The study finds that although the provisioning of education inputs is between three and 20 times more equitable than the distribution of income, depending on the input one focuses on, educational output is often as badly distributed as income in society. This underlines the massive problems that the schooling system is experiencing in translating resources into outputs, or into learner performance. The way in which we use our resources is, therefore, just as critical an issue as the level of resourcing that schools have.

[3] It should be noted that the bars do not represent the total non-personnel recurrent funds distributed through the RTL, but only the portion of these funds distributed from non-poor to poor learners. Limpopo's surge in 2001 was due to a rollover of 2000 funds. Some figures for Eastern Cape were not available.

3

Financial transfers: From national level to the school

This section traces the budgeting trail from national level down to the level of the school. The aim is to identify a few salient points in that process that have an impact on the resourcing of schools. The matter is too complex for a full analysis to be presented here.

3.1 National and provincial per capita expenditure averages

Favouring of poor provinces in division of revenue

South Africa's national division of revenue system funds provinces progressively; in other words, poor provinces get more funding per capita of the population than rich provinces. This is in accordance with the equitable share formula (ESF). The progressivity of distribution is slightly diluted by provincial own revenue, since richer provinces have more own-source money than poorer ones. Nevertheless, the net effect is still a division of revenue system that favours the poor.

41% of total allocated to provincial education

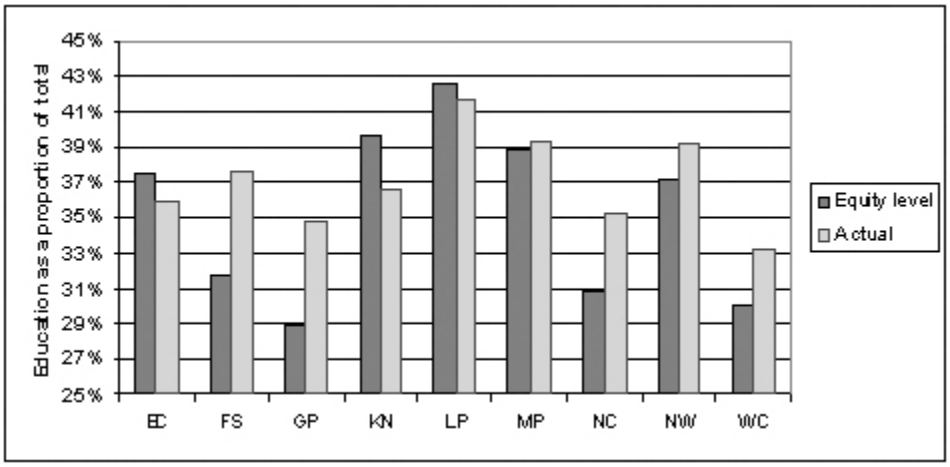
If we examine the 2002/03 financial year, we see that the total block grant to provinces came to R121 billion. Historically, education expenditure has been about 41% of total Government expenditure. This informs the fact that the national division of revenue system uses education baseline data to inform 41% of the inter-provincial split. 41% of the R212 billion that provinces received in 2002 comes to R49,6 billion. If we then divide this R49,6 billion benchmark expenditure figure for education amongst those in the population aged 6 to 17, we get R4,489 per potential school learner. The population aged 6 to 17 is twelve age cohorts. The state has the responsibility to ensure, as a minimum, ten years of compulsory schooling per child. The twelve age cohorts are used in the calculations here, partly in recognition of the fact that the state has an obligation to make education in the FET band progressively available to the population, and because the national division of revenue process uses twelve not ten age cohorts, in determining relative provincial need.

Provinces utilise less of share for education

Attaining an expenditure level of R4,489 per member of the population aged 6 to 17 across all provinces does not imply that each province *must* spend 41% of its total provincial budget on education. This is an important point. If, for example, the Western Cape and Limpopo were to both spend 41% of their provincial budgets on education, the Western Cape would end up spending around R6,100 per child/youth (i.e. population aged 6 to 17), and Limpopo R4,300 per child/youth. In order for both to spend R4,489 per child/youth, the Western Cape would have to devote 30% of its budget to education, and Limpopo 43%. This has to do with, firstly, some additional budgetary space available in the Western Cape due owing to own tax revenue, and the fact that Limpopo has a younger population than the Western Cape. The following graph shows

that the Western Cape and Limpopo spent 33% and 42%, respectively, of their 2002 budgets on education (note that the vertical axis is truncated at 25%). This, paradoxically, represents a slight under-expenditure in the case of Limpopo, and a fairly significant over-expenditure in the case of the Western Cape, if we use inter-provincial equity as our benchmark.

Figure 4: Provincial education expenditure over provincial total (2002)[4]



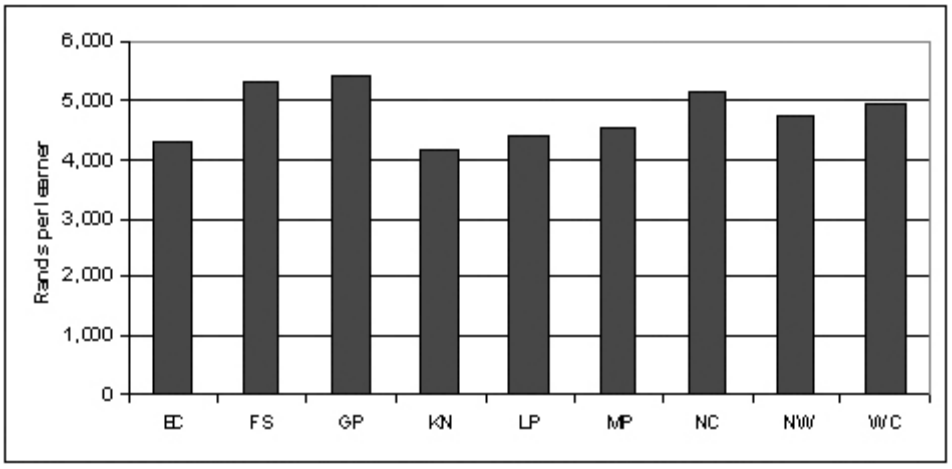
Differences in per capita education expenditure among provinces

The following graph shows what the actual per child/learner expenditure in each province was in 2002. The Western Cape was able to spend about R4 950 per child/learner, and Limpopo, R4,400. The overall inter-provincial inequality represented by the graph translates into a Gini inequality coefficient of 0.05 (this inequality is less than one-tenth of the income inequality of the country as a whole)[5].

[4] The Equity level values reflect percentage of the total provincial Government budget that would have to be spent on education if the R4,489 national average discussed were to be attained across all provinces. The Actual bar reflects the actual percentage for 2002. Numerator is thus total provincial expenditure, and the denominator population aged 6 to 17. The 6 to 17 age cohorts are used as these are the cohorts used in the ESF. However, use of the ten compulsory school age cohorts would not change the inequality arguments significantly. Note that the vertical axis is truncated at 25%.

[5] The inter-provincial Gini coefficient presented here and elsewhere in this section uses the assumption that within each province, expenditure per child/youth or learner is equal. This is of course only partly true, yet true enough to make these inter-provincial measures of inequality meaningful.

Figure 5: Actual expenditure over population aged 6 to17 (2002)



It is important to understand how this inequality in potential education expenditure per learner (we are still dealing with twelve age cohorts of the population, not actual enrolment) comes about.

Equity in the ESF treatment of education

The ESF follows an equity approach when it comes to calculating the education component in the national division of revenue system. In fact, a relatively small pro-poor infrastructure backlog component applicable to education makes the overall ESF treatment of education slightly pro-poor. The relative weighting of learners and population in the ESF, determined in order to discourage enrolment of inappropriately aged learners in provinces, does result in a slight bias against the poorer provinces, but it is important to realise that overall, after we have taken account of the backlog component, the ESF implies an almost completely equitable, although slightly pro-poor, distribution of education expenditure per child/youth.

Inequality across provinces in actual expenditure

There are essentially two factors that account for the unequal *actual* education expenditure per child/youth figures across provinces. Firstly, the own tax revenue of some provinces, whilst small in absolute terms, is sufficient to make a significant difference on the margin. The Western Cape collects about R188 per capita in provincial tax revenue, whilst the figure for Limpopo is R48. This gives the Western Cape the space to raise provincial expenditure on education to 33% of the total provincial budget (the 'equity benchmark' was 30%). Secondly, welfare and health pressures in the poorer provinces are particularly strong, leading very often to budgetary shifts towards those social sectors, at the expense of education. Hence, although Limpopo's expenditure per child/youth in education is lower than for the Western Cape, Limpopo's per capita expenditure on welfare is 2% higher than that of the Western Cape.

Provincial priorities

A comparison between Gauteng and KwaZulu-Natal reveals similar trends, with some interesting differences. The previous graph shows that potential per-learner expenditure is 30% greater in Gauteng than in KwaZulu-Natal. This is despite the fact that the national division of revenue system grants KwaZulu-Natal overall, i.e. across all sectors, 4% more per capita in the population than Gauteng. In KwaZulu-Natal,

however, the welfare pressures, and even the health pressures, are particularly strong. KwaZulu-Natal spends 55% more per capita in the population than Gauteng in terms of welfare grants. In health, although Gauteng's per capita expenditure is higher than KwaZulu-Natal's, KwaZulu-Natal spends a lot more per capita than the other poor provinces – KwaZulu-Natal's figure is about 50% higher than that for Limpopo.

Provincial choices

There are no easy solutions to these problems. If a provincial government has decided to fund one sector more than another, when compared to a national average or other provinces, this could be the result of legitimate and well-informed economic and social value decisions within the province. It would be difficult to argue that in such a case a national norm should overrule the provincial decision. However, if a province's deviation from some average is the result of exceptional health, social or other pressures, and education funding is crowded out as a result, this would raise the necessity for the national funding mechanism to take better cognisance of these pressures, in order that the division of revenue system may respond more accurately to real pressures.

Growth in education expenditure should not be at expense of other social functions

Understanding the variance across provinces in respect of education expenditure means understanding the social, trade union, infrastructure, epidemiological and other factors at play across all sectors. Given the dynamic relationships between sectors, education stakeholders need to take part, or maybe take a leadership role, in the important debates around the key budgetary trade-offs. We should not see education competing with other social sectors in the provinces for funds, but rather taking part in decisions around optimal mixes of education, social welfare, health and other social service delivery. If social welfare expenditure is cut, more learners may come to school hungry, or may not come at all; yet, if education is under-funded, more school-leavers will be unable to earn an income and will become dependent (or their children will become dependent) on welfare grants. These are the kinds of dynamics that should inform the debates.

Review of equitable shares

The National Treasury is leading a process during 2003 to review the ESF in the light of unfolding expenditure pressures in provinces. Moreover, Census 2001 data will become ready for use in the formula during 2003, allowing for a more accurate reflection of the demand for social services in the provinces. The DoE and PEDs will be actively involved in this process, and many of the issues dealt with in this section will receive attention.

3.2 Expenditure breakdown within provincial education systems

We have looked at how provinces divide up their funds between education and other sectors, and we have noted that this varies considerably between provinces, affecting the equality in per-learner spending. But PEDs also differ markedly in the way in which they divide up the provincial *education* budget. In some cases the reasons are sound and clear, and have to do with enrolment and unit cost, especially

teacher salary, pressures. In other cases, the reasons are less easy to explain. In those cases PEDs may be budgeting sub-optimally.

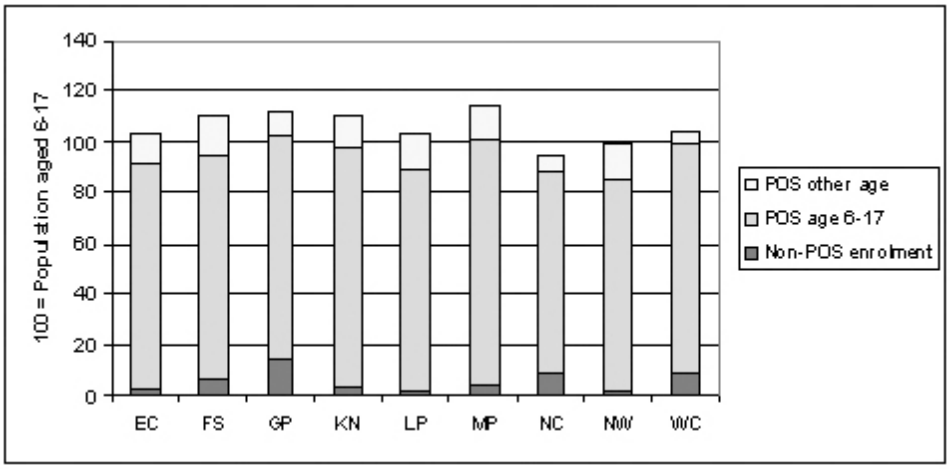
Differing expenditure on non-POS by provinces

The proportion of the provincial education budget spent on the public ordinary schools (POS) programme (as opposed to colleges, independent schools, etc.) varies enormously from one province to another. Gauteng spends only 76% of the total on POS, whilst in KwaZulu-Natal the figure is 90%. This is to a large degree related to pressure in the non-POS education budgets. In general, greater enrolment in other institutions, such as special schools, and greater expenditure per learner in these other institutions, lowers the proportion spent on public ordinary schools. However, there are striking differences between poor provinces. The Eastern Cape spends only 80% of its education budget on POSs, where the figure is 90% for KwaZulu-Natal. This is partly linked to the fact the Eastern Cape spends more on every special school learner and every FET college student than KwaZulu-Natal does. Both of these poor provinces spend more on each special school learner than Gauteng. Given large and probably sub-optimal differences, it seems that the lessons learned about how to improve budgeting have not yet been exchanged enough between the provinces.

Inappropriately-aged learners in the schooling system

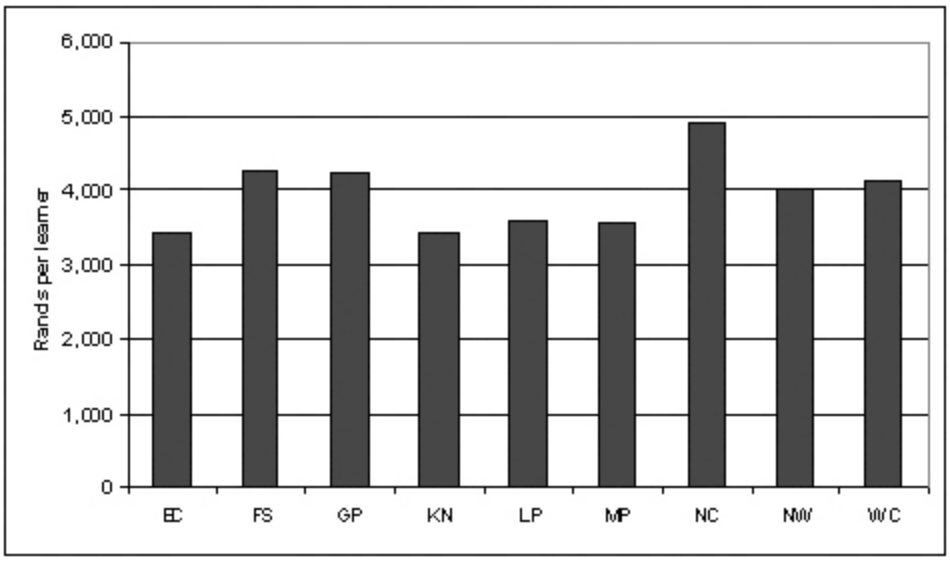
The following graph illustrates how total enrolment in the various types of publicly funded institutions (except for ABET centres) compares to population aged 6 to 17. All provinces except for the Northern Cape fund more learners than there are people in the twelve age cohorts from 6 to 17. In fact, an important reason for the current high per-learner expenditure figure in the Northern Cape is that there is a relatively serious problem of access to schools in this province, linked to distances and availability and affordability of transport. It may seem from the graph that per-learner expenditure could be significantly improved, especially in the poorer provinces, through the gradual removal of inappropriately aged learners from the public ordinary schooling system. In a narrow sense, this is correct. However, it should be remembered that whilst a province like Limpopo may have too many inappropriately aged learners in the system, there is also a significant number of learners aged 6 to 17 who are *not* at school, including children aged 7 to 15 who, in terms of SASA, must attend school . Improvements to the schooling system in Limpopo would require both the gradual elimination of over-age enrolment and the inclusion of more appropriately aged learners in school. The net difference to enrolment would not be great.

Figure 6: Enrolment indexed to population (2002)6



The following graph shows what the per-learner expenditure figures are for POS only. The Gini coefficient implied by these expenditure figures is 0.05; in other words, actual inter-provincial inequality in POS expenditure is more or less the same as the more theoretical (but important) inequality measure referring to total provincial expenditure per child/youth which was looked at in the previous section.

Figure 7: Per-learner expenditure in POS (2002)[7]



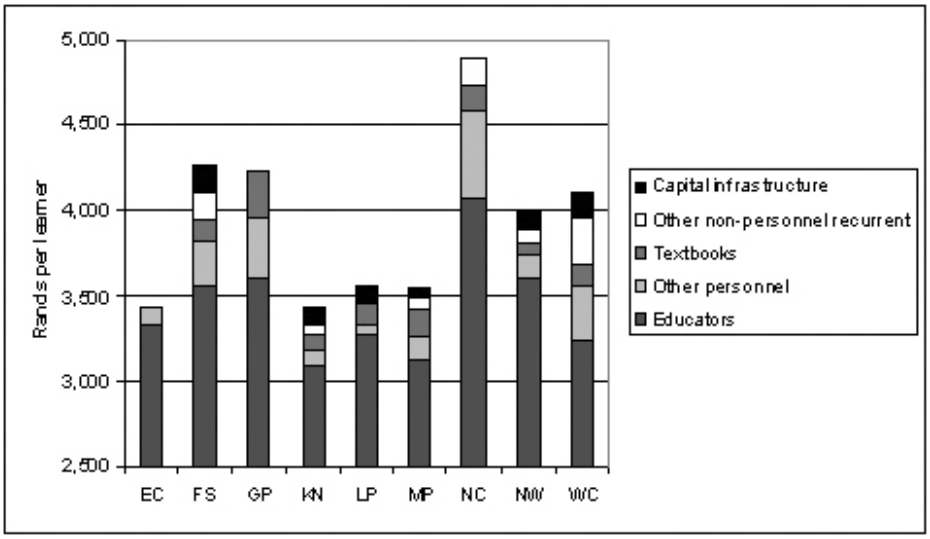
[6] Enrolment is indexed, so that 100 equals population in the province aged 6 to 17. In other words, any bar that exceeds the 100 level is indicative of enrolment that exceeds population in the twelve age cohorts of the population. Non-POS enrolment is the sum of enrolment in FET colleges, special schools and independent schools. The division of the POS enrolment into two categories is based on 1999 and 2000 age data, so the division can be regarded as a general indication of what has been happening, not an accurate reflection of the situation in 2002.

[7] The ESF values are the same as those used in the previous section, and are presented here to assist comparison. The Actual values are actual POS expenditure over actual enrolment in POS in Grades 1 to 12.

Personnel expenditure crowds out non-personnel inputs

The following graph breaks down the values from the previous graph according to type of input. Provinces with less to spend on each learner in total, tend to spend a lot less, even proportionally, on items other than educator salaries. For example, the Free State, with R4,267 to spend on each learners in 2002, devoted 17% of the POS budget (or R705 per learner) to non-educator items, whilst Limpopo, with R3,563 to spend on each learner, devoted only 8% of the POS budget (or R285 per learner) to non-educator items. Poorer provinces, which spend less per learner, are particularly susceptible to the crowding out of non-personnel expenditure by personnel, and particularly educator, expenditure. This is a serious problem, with serious consequences for efficiency. It is unlikely that the efficiency of each educator is maintained when the availability of non-personnel inputs decreases. A teacher in a class where each textbook is shared by five learners would not be as effective as a teacher in a class where each learner has a textbook. The efficiency losses inherent in the crowding out of non-personnel items is, therefore, greater than the lower per capita expenditure figure might suggest. Avoiding highly distorted mixes of school inputs should be a concern for all stakeholders.

Figure 8: POS expenditure per learner by type of input (2002)[8]



Differing unit cost of personnel input among provinces

Some of the differences between provinces with regard to proportion spent on non-educator items are explained by the unit cost of educators. For instance, the ability of the Free State to spend more on non-educator items than North West, a similar province in terms of total budget per learner available, lies in the fact that each educator costs on average 6% less in the Free State than North West. This is in all likelihood due to the fact that North West teachers have either more training or more seniority, or there area more of them in higher posts, and therefore they earn

[8] This graph breaks up the Actual values in the previous graph. Note that the bottoms of the bars in this graph are truncated in order make the non-educator expenditure values more visible. There are some problems with these values insofar as they do not always refer to exactly the same items. However, they do provide a reasonable picture of the overall inter-provincial differences. Eastern Cape's data, which is incomplete, would be an exception. *Note that the vertical axis is truncated.*

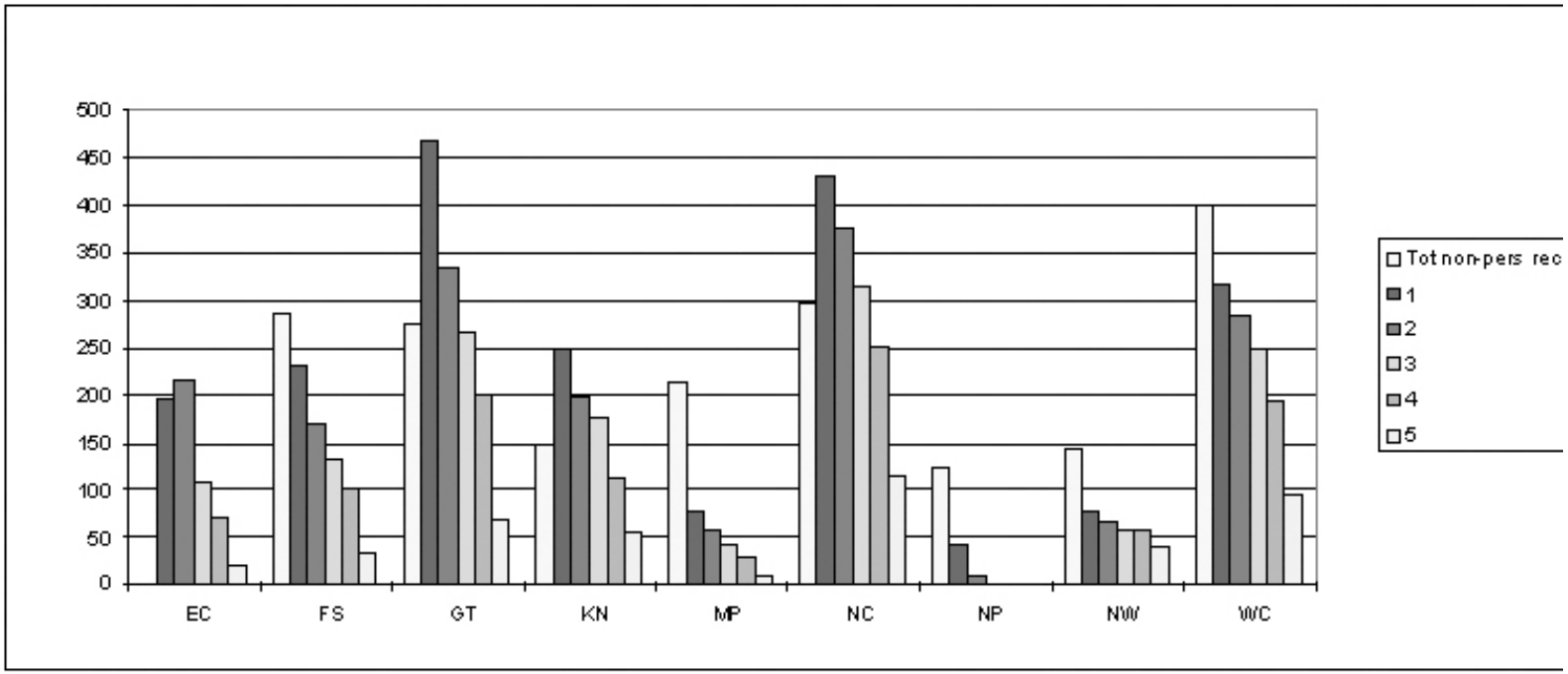
more, on average. (Since the actual salary scale is national, teachers in one province are more costly than teachers in another province only if they are, on average, at higher pay points in the scale.) In a narrow sense, one might expect North West's higher expenditure on each educator to translate into more efficient educators than in the Free State, but this is unlikely to be the case, especially given the differences in the level of non-personnel inputs in the two provinces.

3.3 Transfers to schools

5% of total educational non-personnel inputs directly allocated to schools

The state transfers resources to schools in the form of educator and non-educator posts, infrastructure development and maintenance and school allocations to cover non-personnel recurrent items (or goods to the value of the allocation in the case of non-section-21 schools). The latter input, despite the fact that it comprises only some 5% of total inputs, has received much attention as it represents the first systematic effort by the state to bring about pro-poor redress, and because the adequacy of non-personnel recurrent funding is something that is felt in a very immediate way. Furthermore, these allocations represent inputs that, at the margin, can have a considerable impact on learning. The graph on the next page shows what the situation was with regard to the non-personnel allocations in 2002.

Figure 9: Non-personnel recurrent expenditure per learner across quintiles in 2002[9]



[9] The 1 to 5 bars represent the per learner value of school allocations across the different quintiles in the various provinces. The 'Tot non-pers recurr' bar represents the total non-personnel recurrent budget for public ordinary schools in per learner terms. This amount is included in the graph in order to show the top-slicing phenomenon whereby some of the non-personnel recurrent budget is not distributed via the RTL. The difference between this yellow bar and the bar for quintile 3 represents the amount of top-slicing away from the distribution via the RTL. Gauteng is an example of a province that does not top-slice a significant portion of the budget, and for this reason the first bar is almost equal to the average per learner allocation in the province, represented by the bar for the third, or middle quintile. Per learner allocations were adjusted slightly to deal with the fact that not all provinces have exactly equal quintiles of learners. Eastern Cape's data is incomplete.

Top-slicing prior to school allocations

If we take the Free State as an example, we see that the provincial budget for non-personnel recurrent expenditure allowed a maximum of R287 per learner to be allocated. However, the actual school allocations set in terms of the National Norms and Standards for School Funding policy were, on average, lower than this amount. This was because 'top slicing' occurred, i.e. some of the spending occurred outside the school allocations mechanism, e.g. on minor repairs implemented centrally by the province. The relative sizes of the quintile 3[three] and total amounts indicate that, in the case of the Free State, about half of the budget was top-sliced. The school allocations were worth R233, R167, R133, R100 and R34 per learner for quintiles 1, 2, 3, 4 and 5 respectively. Quintile 1 is the poorest fifth of learners, quintile 2 is the next poorest fifth of learners, and so on. This means that the Free State followed the 35-25-20-15-5 progressivity curve set as a benchmark in the Norms and Standards fully. The poorest learners received seven times as much as the least poor learners. What the available data does not indicate, is the degree to which the top-sliced amount was distributed progressively. Some provinces allocate part of the top-sliced amount progressively, in some cases in accordance with the benchmark distribution curve. However, if provinces are top-slicing resources in this manner, and then not distributing the stop-sliced amount according to the Funding Norms, so as to purposefully draw money away from poorer schools, this would be in substantive violation of the Norms and Standards, and would undermine the purpose of increasing the progressivity of total spending.

Pro-poor redress in all provinces

The following table indicates that six of the nine provinces followed the benchmark distribution curve as far as the actual allocations were concerned (the provinces that did not follow this curve, are the Western Cape, the Northern Cape and KwaZulu-Natal). The policy permits a deviation from the benchmark if the distribution of income justifies this.

Table 1: Table 1: Pro-poor distribution of school allocations (2002)[10]

	Q1	Q2	Q3	Q4	Q5
EC	32%	36%	18%	12%	3%
FS	35%	25%	20%	15%	5%
GP	35%	25%	20%	15%	5%
KN	31%	25%	22%	14%	7%
LP	35%	25%	20%	15%	5%
MP	36%	26%	20%	14%	4%
NC	29%	25%	21%	17%	8%
NW	36%	25%	20%	15%	5%
WC	28%	25%	22%	17%	9%

The money allocated to each learner in each school depends on three things:

[10] Percentages represent proportion of the total amount distributed through the RTL that went to each learner quintile, with Q1 being the poorest quintile.

The size of the non-personnel recurrent budget per learner. The previous graph indicates that this varied significantly from province to province, with the poorer provinces budgeting less.

The proportion of the budget that was top-sliced. Only Gauteng, the Northern Cape and KwaZulu-Natal got close to allocating all funds as school allocations, thus giving schools more control over their resources, and thus also making the progressivity of their funding more transparent.

The distribution curve used. Owing to the use of a different curve in the Northern Cape to the one used in Gauteng, the poorest in Gauteng got more than the poorest in the Northern Cape, and the richest in Gauteng got less than the richest in the Northern Cape. Again, it should be mentioned that the National Norms and Standards for School Funding allows for a flatter distribution if there is less income variation in the province, so the Northern Cape is not necessarily engaging in less effective poverty targeting than Gauteng.

Increasingly progressive funding and growth

In most provinces, school allocations increased significantly in real terms between 2000, the first year in which they were made, and 2002. North West and Limpopo, with low absolute levels, were notable exceptions. Further significant increases are not expected unless problems relating to the total envelope in the poorer provinces, and possibly inappropriate budgeting, are sorted out.

3.4 The national budget reform process

Consequences of targets

Up till now, problems around budget allocations have been dealt with largely through specific targets. For example, the National Norms and Standards for School Funding sets a long-range target of 80 to 20 for personnel to non-personnel spending in PEDs. Focus on this specific target was largely responsible for solving a problem of unsustainably high personnel expenditure in the mid-1990s. Whilst budget targets have an important role to play, they should be underpinned by comprehensive and holistic analysis of the whole education package, and of the trade-offs between particular inputs. Targets on their own, operating in isolation from the bigger picture, tend to produce over-reactions, and new expenditure pressures in other areas of the budget.

Standardised programme and expenditure categories

Sound financial and economic analysis depends on the availability of reliable and comparable data. The National Treasury is leading a major budget reform process in the country. For education in 2002, this has implied the introduction of standardised strategic planning and reporting formats, including frameworks for analysis to inform the budgeting process. Moreover, the education system now has standardised budget programmes and economic classifications across all provinces. These achievements are the result of many years of preparation and consultation. A solid foundation has thus been laid for vastly improved planning and budgeting in Government and, specifically, in education. The challenge, now, is to ensure that these improved systems and frameworks are put to good use, and that capacity in this regard is developed amongst managers at all levels.

3.5 Recommendations

With regard to the budgeting processes from the national level to the school, the following is recommended.

An education budget monitoring and support office

The Department of Education should:

Greatly improve its capacity to analyse and influence national and provincial budgets, in line with its responsibility to monitor the education system and improve Government planning within the framework of the current budget reform process. Reasons for unequal education expenditure across provinces, provincial differences in the prioritisation of public ordinary schools, and the resource mix should receive special attention. Where poorly informed budgeting processes are detected, the DoE should attempt to rectify the situation. Best practice in provincial budgeting should be used to guide practice in the country as a whole.

Set up a budget monitoring and support office dedicated to the analysis of budgets, high-level training of PED planners, and production of support material, such as manuals and analysis tools. The office should be capacitated during 2003, and should by 2004 or 2005 be viewed by PEDs as a valuable resource, capable of adding value to financial analysis and budgeting processes from the national level to the school level.

Pay careful attention to pro-poor funding in provincial education systems in order to track the implementation of national policies and strategies in this regard

Be actively involved in the reviewing of the equitable share formula during 2003, with a view to relieving current pressures that impact on education expenditure in provinces.

4

Personnel resourcing and management

Personnel expenditure around 90% of POS budget

In most provinces, personnel expenditure accounts for over 90% of public ordinary school expenditure. Mpumalanga has the highest figure in this regard, namely, 94%. Clearly, a major part of the success of public schooling hinges on the effective translation of personnel budgets into effective and sustainable teaching and learning. To a large degree this involves ensuring that the overall resource mix is right. Teachers require the right mix of non-personnel resources if they are to be effective.

The analysis in this section simply highlights some key points, but does not provide a comprehensive analysis of the issues. The recommendations, on the other hand, are informed by a large range of analyses, some of which are not included here, but have been included in other official education reports. To a large degree, the recommendations are a reaffirmation of strategies described in Tirisano and other education plans.

4.1 Teacher utilisation

Teachers, as an education input, are utilised in particular ways in the schooling system. The efficiency of teacher utilisation is a key factor influencing the overall efficiency and effectiveness of the schooling system. The efficiency of teacher utilisation is contingent on how educators are managed, and how educators manage themselves. But what is also vital, is the degree to which the policies, physical infrastructure, curriculum and culture of the schooling system permit efficient teacher utilisation to take place.

There is often a reluctance to consider changes to the basic parameters determining teacher utilisation. Teachers sometimes tend to be suspicious of proposals on how teachers can become more efficient. However, if properly conceptualised and implemented, teachers, learners and society as a whole clearly stand to gain from these changes. The problem is that the mutually beneficial nature of certain solutions may only become clear with careful consideration. It is important for all parties, including teachers, to be open to the whole range of options.

Innovative use of teachers

To take an example, certain options relating to L:E ratios are misunderstood, or not properly explored. A smaller class with no physical resources, such as textbooks and wall charts, may well be less pleasant for the teacher, and less efficient, than a slightly larger class with more physical resources. The trade-off between the L:E ratio and the level of physical resources in the classroom is a dynamic and real one, and

should receive careful consideration in the negotiations and discussions between the state, as employer, and teacher unions.
Teacher utilisation involves systems and management to ensure that teachers and learners meet in the classroom. The following issues can be noted:

Efficient scheduling of teachers

School timetabling is a complex matter, and many schools do not succeed in finalising their timetables until after the school year has begun. Developing timetabling skills and providing timetabling tools to schools is an important way of improving teacher utilisation.

Currently, publicly employed educators cannot work overtime for additional pay. Though there are some good reasons for this, efficient teacher utilisation could be enhanced by a more flexible approach.

Teacher utilisation also involves mixing the teacher input with other inputs in the classroom, and putting together classes of a particular mix of learners, and of a particular size.

Equip the teaching process

The technology that can be made available in classrooms ranges from books, chalk and chalkboards, to televisions, radios, and computers. Initial fears that televisions and computers might replace teachers have proven to be unfounded. These technologies help to enhance the quality of teaching; they do not replace teachers. The DoE has invested considerable effort into researching alternative classroom technologies to support learning and teaching.

Teacher assistants have been found to enhance teacher efficiency in the primary grades, either through improved performance of learners, or through the possibility of larger classes.

Class size

Parents are often surprised to hear that a province has an average L:E ratio of 32:1, yet their children sit in classes of over 50 learners. The average L:E ratio receives a lot of attention by planners, but how this translates into actual class size is often not understood. At least one province has adopted an approach to ensure that the actual number of learners per class does not exceed a critical level beyond which the efficiency of the teaching process is seriously compromised. This is something that should be explored further.

Multi-grade teaching is not popular amongst teachers, yet in small schools it is practically unavoidable. A greater focus on methodologies and materials that will help teachers teaching more than one grade at a time is needed.

Unnecessary non-core tasks

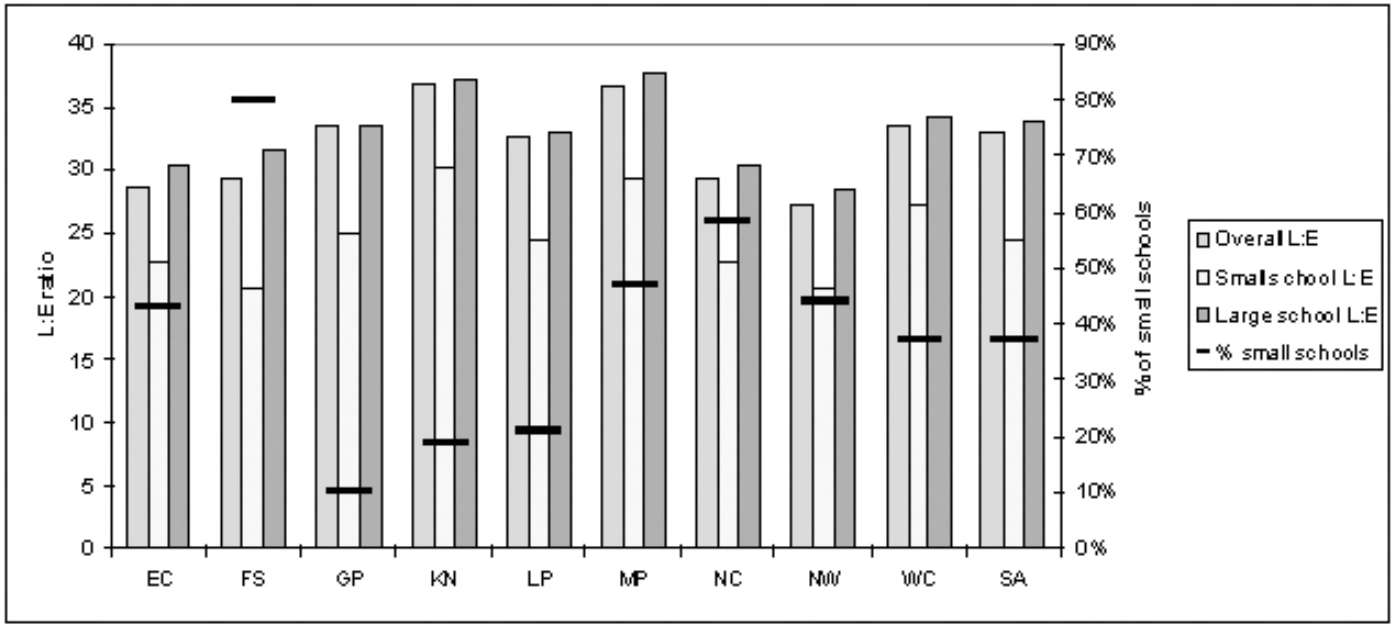
Finally, the efficiency of teacher utilisation is influenced by how much work teachers are expected to do, or actually do, outside the classroom. There are both curriculum and administrative requirements for work outside the classroom. Class preparation work generally makes teaching more efficient. However, if the nature of the curriculum, or a lack of access to good model lesson plans, force the teacher to spend excessive time on class preparation, the impact on efficiency can be negative, especially if the result is less contact time with learners. Administrative work, such as the processing of attendance data, rarely

adds direct value to the efficiency of the teacher. For this reason, there is widespread support for more administrative assistants in schools.

Optimal school size

The following graph indicates some interesting inter-provincial differences with regard to primary school size and the L:E ratio (all figures refer to primary schools only). The percentage of primary schools that can be regarded as 'small', varies from 80% in the case of the Free State to 10% in the case of Gauteng. The provincial average L:E ratio varies from a high of 36.7 (KwaZulu-Natal) to 27.2 (North West). The L:E ratio for small schools only is always somewhat lower than that for the province as a whole. This is because the 1998 post provisioning policy favours small schools somewhat. The L:E ratio for non-small, or large, schools will logically be somewhat higher than the overall ratio. A number of things stand out. Firstly, the overall L:E ratio does not appear to be strongly linked to the fiscal advantage enjoyed by the province. The Western Cape, for instance, is an advantaged province, yet its overall L:E ratio is higher than that of the Eastern Cape. Secondly, the L:E ratio for small schools varies considerably between provinces, from 20.6 to 30.2, and this despite the fact that all are using the same post provisioning model. Clearly, the L:E ratio applied to small schools will influence what the resultant L:E ratio will be for large schools. On average the large school L:E ratio is 1 learner higher than the overall L:E ratio, but this varies across provinces. All this begs the question of what is optimal. For instance, is teacher provisioning in the Free State perhaps a bit too generous to small schools relative to large schools, given that the gap between the two rates is so large?

Figure 10: Percentage of small schools and L:E ratios per province[11]



[11] The small horizontal bars, referring to percentage of small schools in the province, should be read against the scale on the right-hand axis. Small schools are considered to be those with an average 'grade group size' of less than 30. Total enrolment of a school is not really the issue here, as the focus is on smallness from the perspective of teacher provisioning. A school may have 100 learners, but only Grade 1, in which case it is not a difficult school in terms of teacher provisioning. However, if the school has 100 learners spread across all 12 grades, then it would be very difficult to efficiently provision the school. The critical indicator is thus average 'grade group size', or total enrolment divided by the number of grades.

Whilst it is important for the education departments to discuss the issues raised in this section with teacher organisations, as has indeed been done, it is also important for the PEDs, and even more so the DoE, to engage in research that can inform the teacher utilisation debates in the country.

4.2 The quality of the teacher input

The average quality of our teacher input is low, when viewed relative to cost and relative to the situation in other countries (see section **0** below). This obviously impacts strongly on the efficiency of the schooling system.

Quality of teaching?

The qualitative aspect of our teachers has a number of different levels. There is a level of professional competence relating to the specific (and in many cases new) curriculum that teachers are expected to teach. There is a level of general professional competence relating to generic teaching skills, including skills for sourcing materials, adapting materials, presenting materials, and so on. Then there are also competencies required on the level of commitment, morale and values. Any assessment of teacher quality, and any design of quality improvement initiatives, needs to take the full range of qualitative issues into account. Teachers who appear to understand the new curriculum well, but lack generic teaching skills, and have not internalised the importance of redress towards poor learners in the classroom, are unlikely to be good teachers.

Improved teacher qualifications

There has been a significant focus on the part of the education departments, and teachers themselves, on improving qualifications. Between 1994 and 2002, the percentage of fully qualified teachers in the system increased from 64% to 84%. This was achieved partly through monetary incentives, partly through the offering of bursaries, and very often through the independent initiatives of teachers. Interventions on the part of the training institutions have succeeded in weeding out sub-standard service providers that made the infamous ‘paper chase’, i.e. pursuit of more or less worthless qualifications, possible in the past.

Much of the focus has been on expanding the skills base in scarce offerings, in particular mathematics and science. In-service training (INSET) by PEDs and contracted service providers offered directly to groups of educators at schools have played an important role, especially as far as training in the new curriculum is concerned.

Campaigns and high-profile teacher awards ceremonies, the most notable being the National Teaching Awards, have assisted in generating professional pride and highlighting positive role models.

Incentives for teachers to improve quality

The education departments should continue their current quality enhancement work, and, moreover, make it increasingly rewarding, in terms of money and prestige, to improve the quality of one’s own teaching. Conversely, the system should make it increasingly difficult for a teacher to continue from one year to the next without making any effort to improve his or her skills and knowledge.

4.3 Recommendations

With regard to personnel resourcing and management, the following is recommended:

More efficient and practical teacher utilisation techniques

The Department of Education should:

- Á Further explore, through research and discussions with teacher organisations, the various options available for increasing the efficiency of teacher utilisation in the schooling system. The results of a broad, but practical, study into the various utilisation scenarios should be produced during 2003 and 2004.
- Á Look into ways of improving the way in which the school day, school term and school year are structured in the schooling system, in order to promote efficient schooling. Schools' capacity to set timetables effectively, should be enhanced.
- Á Look into the impact of different input mixes in the classroom on the efficiency of teaching. Past research into technology solutions should be consolidated.
- Á Examine possible improvements to the teacher resourcing policies, with a special focus on how the various L:E ratios work in the system, and how this impacts on efficiency.
- Á Continue to explore policy and budgetary options that can improve teaching efficiency through better administrative support capacity in schools.

Strengthening of current initiatives to develop teacher capacity and reward professional excellence

The Department of Education should:

Together with PEDs, continue with and expand current quality improvement initiatives aimed at teachers, focussing on the whole range of quality issues, from specific curriculum knowledge, to generic teaching skills, to values and morale.
Increasingly reward teachers who improve their own capacity to teach well, and hold accountable those teachers who make no attempt to do so.

5

Translating school allocations to appropriate non-personnel resources

This section deals with blockages and solutions relating to the conversion of school allocations, issued in terms of the National Norms and Standards for School Funding, into school resources such as textbooks, stationery and electricity.

5.1 Section 21 and non-section-21 schools

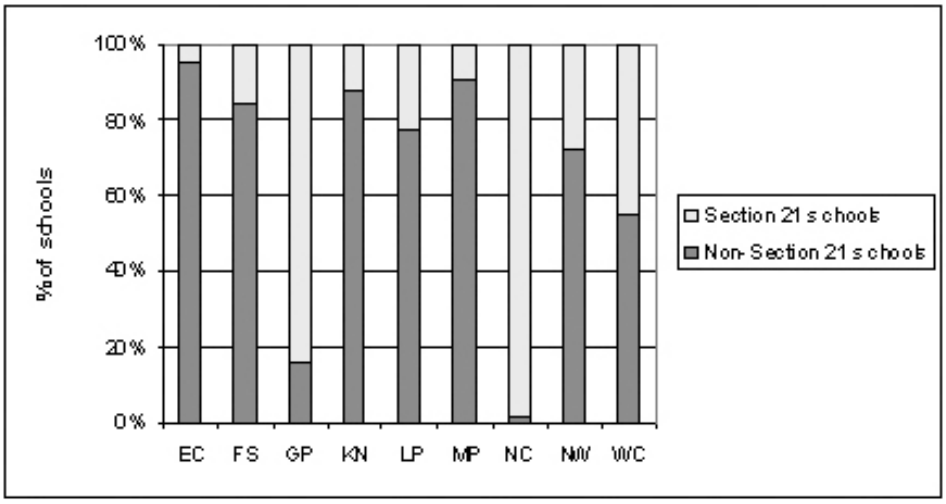
Popular participatory democracy at school level

SASA and the Norms and Standards envisage a situation in which all parents, teachers, and learners, via their schools, assume greater responsibility for managing the way in which their state resources are translated into good teaching and learning. This is not simply a matter of a technocratic state policy, but is deeply rooted in the vision of empowered communities that was part of the nation's struggle against apartheid. This is not to say that there is no role for administration and 'bureaucracy' in our system, but that community-based and democratic practices are also a major aspect of our system. More importantly, whilst the policies do say that schools should actively raise funds, from their communities, to supplement state resourcing, the aim of these policies is not to relieve the state from its duty to provide for basic education, especially for the poor. On the contrary, the aim is to create opportunities for the redistribution toward the poor, via the implantation of a pro-poor bias in public funding, thus inducing the rich to complement funding provided by the state. In fact, the web of policies is aimed at doing precisely this, while at the same time eliciting community involvement. If the poor are not served by this system, then the system is not working as it should. We should recognise that some misreading of the policy, by the public but even by Departmental managers, combined with budgetary constraints described elsewhere in this Report, have in some circles created the false impression that the devolution of resource management powers to the schools means that schools – even poor schools – are expected to take over resource-raising. This is not what the policies say or intended, and it is important to separate the two issues. The policies expect all schools, even poor schools, to eventually take a role in managing resources. While the rich are expected to raise some resources from own-source funding, because the public funding is being steered towards the poor, the poorer schools are not expected to raise own-source resources, even though they are to be given the opportunity to manage publicly provided resources. Furthermore, the state has taken on the legal obligation to allocate resources to the development of this management and governance capacity, and it must take this duty seriously.

According to our legislation and regulations, this transfer of responsibilities to schools takes the form of the official transfer of SASA

section 21 responsibilities to individual schools. The following graph illustrates the extent to which this has happened in the various provinces.

Figure 11: Proportion of section 21 schools across provinces (2002)



Redress of efficient management at school level

Although there is still a strong overlap between section 21 status and a school's history as an ex-white Model C school, an increasing number of section 21 schools that were not white schools is emerging. The situation in the Northern Cape shows this clearly. In Limpopo, whilst fewer than 2% of all schools are ex-Model-Cs, 23% of schools now have section 21 status. The continuing non-racialisation of management status is an important goal, and should be reinforced. The right of all groups to have the same governance and management duties, regardless of historical background, should be seen as closely related to basic rights. There has never been any attempt to put a timetable to the transfer of section 21 status to all schools, partly because the process is, to a large degree, subject to the rate at which schools themselves apply for this status, but, also, owing to the inherent unpredictability of school management improvements. The process is necessarily a long one, yet the ultimate objective should not be forgotten, even in short-term planning.

5.2 Problems experienced by non-section-21 schools

Although non-section-21 schools are expected to compile 'paper budgets' determining the usage of their school allocations, these schools are ultimately dependent on the PED for the translation of the allocation into goods and services for the school. The DoE's 2003 special survey into school resourcing showed that non-section-21 schools are experiencing a range of serious problems in this regard. The following list summarises these problems.

Á School principals often do not have the skills required to lead the budgeting process. The absence of a credible budget means there is no basis for placing orders against the school allocation managed by the PED. (There is an anomaly here, however, insofar as the National Norms and Standards for School Funding suggest that the PED, and not the school, should take responsibility for drawing up

the ‘paper budget’ for the school, so in one sense the problem is the PED’s, not the school principal’s.)

- Á Schools often do not understand the overall pro-poor school funding framework. Things like the resource targeting list, the division of schools into quintiles, and the imperative of poverty alleviation are not fully grasped. This reduces the chances that schools will budget according to the pro-poor objectives of the Funding Norms and Standards.

Lack of capacity in disadvantaged schools

- Á There is insufficient knowledge of what section 21 status entails, what it implies in terms of qualitative improvements in the schools, and how this status is obtained. PED support in this regard is often weak. Some schools applying for section 21 status get no response from the PED.

- Á The instruction from the PED that explicit portions of the school allocation should be spent on particular items, e.g. textbooks or stationery, is often not understood, or is seen as inexplicably inconsistent from one school to another within the same province, or is simply regarded as a norm that does not lead to optimal school resourcing. (On the whole, there are noticeably fewer restrictions placed on section 21 schools in terms of what funds may be spent on.)

Poor provincial support in advocating section 21 schools

- Á Most schools have serious problems obtaining running balances from the PED of how much remains of the school allocation at any point in the school year. This problem is compounded by the fact that schools are often not informed of particular expenditure amounts, for instance amounts relating to electricity and water consumption.

Poor provincial support to non-section 21 schools

- Á Items ordered by the school are often delivered late. Late LSM deliveries have received much attention publicly. However, similar problems are experienced with regard to other supplies, from toilet paper to paper for the duplicating machine. It should be noted that within the same province there will be schools reporting timely delivery of goods, and schools reporting serious delays. This suggests that local managers, e.g. district managers, can make a difference and, moreover, that best practice models do exist for others to learn from.

Non-section 21 schools being further disadvantaged

- Á Because non-section-21 schools are forced to spend their entire allocations within one school year, i.e. there are no rollovers, these schools are, ironically, at an economic disadvantage compared to the often richer section 21 schools and, moreover, are not able to save for the purchase of larger items, e.g. computers and duplicating machines. This has a direct influence on the ability of schools to offer the services they should. Schools without their own duplicating facilities must rely on the PED or local photocopy shops for the duplication of tests, worksheets, circulars to parents, etc. In some schools, where these options are not available, learners and parents are forced to do without.

Need for effective capacity building

All of these problems fit into one of three categories: (1) problems caused by difficulties in school-level governance, (2) problems caused by difficulties in school-level management, and (3) problems caused by insufficient PED-level use of accounting and budget tracking systems, and insufficient PED-level skills in creating and using linkages between budgeting and procurement groups within the PEDs. On problems (1) and (2) there is now sufficient evidence, from school and district level pilot projects, that schools' governance and management teams can indeed be trained so that these issues are greatly improved. When schools are trained, they respond, and processes improve. Moreover, training materials, protocols and approaches exist and have been field-tested. Thus, what needs to be done is to apply good training practices nation-wide by, in particular, absorbing lessons of good field-based trials and pilots in districts or provinces with spontaneous best-practice benchmarks. At the PED level, we need to redouble efforts to re-engineer management and information processes so that budgeting work processes are able to communicate with and link information to procurement/provisioning work processes.

5.3 Short-term and long-term solutions

There are clear short-term and long-term benefits to be gained from management development in schools. However, the optimum role of the PED is a bit ambiguous, given the ongoing conversion of non-section-21 schools to section 21 schools. The role that the PEDs should be playing to support the resourcing of non-section-21 schools is relatively clear, partly because this is a role that Departments have (or should have) been playing for many years. PEDs need to inform schools of the inputs available and their prices, take orders from schools, sign contracts with suppliers, provide delivery details to the supplier and the school, receive complaints about incorrect or late delivery, follow up delivery problems, and so on. In short, the PED is to a large degree serving as the 'resourcing agent' of the non-section-21 school. Section 21 schools, on the other hand, are free to contract directly with whatever suppliers they choose. Until now, this has been relatively unproblematic. But it should be noted that until recently the bulk of section 21 schools were historically advantaged schools in urban centres. As the profile of section 21 schools changes, new dynamics will emerge. To mention just one example, it is possible that section 21 schools in more rural areas could experience procurement problems relating to the less developed nature of the market in these areas. The PED may well have to assume a new role in this regard.

Simple administrative support to non-section 21 schools required

There is a need to examine in more detail what kind of support different kinds of schools will require. Whilst there are compelling reasons for improving the service that PEDs currently provide to non-section-21 schools, some caution needs to be exercised to ensure that bureaucratic capacity is not built up that becomes redundant as more resourcing functions are devolved to schools. PEDs need to structure their capacity fairly flexibly, so that it can change as the service demand evolves.

5.4 PEDs as resourcing agents serving schools

Need to improve PED capacity

There is an immediate and urgent need to improve the capacity of PED units dealing with school procurement, logistics and finance. The

services they offer can be improved through better design of workflow, procedures, paper forms that schools are required to complete, and so on. Not only should the system work, but it should work with minimum complication and duplication. Time spent by the school principal filling in the same information on different forms, or explaining the same non-delivery problem to five different PED officials, is time not spent managing education in the school. The correct procedures to be followed by schools, including grievance procedures, should be communicated to school principals adequately and in writing. Information required for proper management should be readily available. In particular, the size of the school allocation should be communicated to the school by September of the previous year, at the latest, in order to allow for proper school level planning. It should be easy for the school principal to check the status of an order placed by the school at any point between the submission of the order and delivery. The PED, rather than regarding the complaints of school principals as a threat, should use complaints to improve systems and maintain the accountability of PED officials. In this regard, monitoring mechanisms, such as provincial complaints hotlines, serve a useful purpose.

Promote school-based financial information systems

In 1999 the DoE contracted a service provider to develop an information system that would help PEDs to support non-section-21 schools. The system, which was piloted in the Free State and KwaZulu-Natal and is currently being introduced into six provinces, captures the budgets of non-section-21 schools and tracks orders made by schools. Payment for goods and services is subtracted from the original school allocation, providing the current remaining balance of the allocation. This information system will enhance the ability of PEDs to service schools, although it still needs to be integrated into a broader service delivery system.

Delegation to school principals

Building management capacity in non-section-21 schools means progressively devolving responsibilities and functions to these schools. An option that has been insufficiently explored is to allow non-section-21 schools to deal directly with suppliers, whilst retaining financial control and final procurement approval within the PED. Schools would conclude tentative agreements with the private firms. Upon approval of the agreement by the PED, funds would be transferred directly from the PED to the firm.

Considering that we are dealing with the devolution of some key budgeting, financial management and procurement functions from the departmental to the school level, there is often a critical personnel constraint in the school. Schools are assuming functions that were previously performed by Departments, so there is a strong case for moving personnel with the function. At the very least, there is a strong case for PED officials to spend more time working in schools, or working very closely with school managers, to ensure that there is good technical support in the school budgeting and resource management processes.

Cooperatives for efficient buying

Schools, whether section 21 or non-section-21, could use the advantage of the juristic status conferred on them by SASA to create procurement associations or clubs, which, in turn, would appoint a full-time procurement agent. This would have the advantage that the PED has to

supervise only the procurement practices of one agent working for several schools, instead of the practices of the individual schools. In short, there is no lack of options.

Organisational change in the PED can be assisted through stronger feedback loops relating to quality of service. A more systematic collection and analysis of assessments made by schools of the service they receive from the PED would help to identify pockets of dysfunctionality and excellence in the bureaucracy, which in turn could lead to more targeted organisational development (or disciplinary) actions.

5.5 Financial saving and moveable assets for schools

Inflexibility of non-section 21 school allocations

The National Norms and Standards for School Funding requires schools to use the school allocation to buy items such as media collections and minor equipment. It has been mentioned that non-section-21 schools are at a disadvantage in this regard, as section 21 schools are able to save school funds from one year to the next. Because non-section-21 schools never get the funds actually transferred to them as statutory bodies, and the funds remain in the PED's hands, provinces are forced, in line with general Treasury regulations, to return any funds not spent on behalf of non-section-21 schools within a financial year. This runs counter to the pro-poor provisions of the Funding Norms and Standards, and results in the under-capitalisation of non-section-21 schools.

Protecting non-section 21 allocations

The DoE and National Treasury are currently exploring options that would give non-section-21 and section 21 schools equal powers to save public funds, and hence manage the capitalisation of their schools. One option that does not involve changes to the regulations is for PEDs to place non-section-21 schools in groups, and to separate an equipment or capitalisation portion of the school allocation, so that this could be used to capitalise schools on a rotational basis. Clearly, any such arrangement would have to ensure that the pro-poor distribution of funding is not distorted in the process.

5.6 The monitoring and control functions of the PED

Oversight over school budgeting and accounting

Apart from providing a service to schools, PEDs have the responsibility of monitoring the proper and efficient use of public resources in schools, and taking action when there is a problem. This translates into monitoring of the school budgeting process, and the budgets themselves, as well as ensuring that schools follow proper financial management and accounting procedures, and do not engage in wasteful or fruitless expenditure through, for instance, a failure to preserve the existing stock of goods. The prevention of fraud and corruption is also important in this regard. Monitoring is also linked to learning. Analysis of school budgets by the PED needs to be thorough, and should lead to feedback to schools, so that there can be continual learning and improvement. The monitoring function is determined by the PFMA, and can be expected to increase in importance as schools assume more financial management responsibilities. Monitoring school outputs is of course also critical, though this does not remove the imperative to monitor the inputs side, especially where those inputs are public resources.

Ringfencing or free-ranging?

The current practice of ringfencing portions of the school allocation for particular items, e.g. LSMs, is one way in which PEDs are exercising a resourcing control function. The Funding Norms and Standards do not strongly suggest that this ringfencing should occur. Ringfencing is useful if PEDs have a better idea than the schools themselves of what the optimal mix of inputs in schools is. It is also a useful measure if monitoring systems are too weak to allow the PEDs to pick up irregularities in the financial accounts of the school. However, if schools have a relatively good idea of what is needed for the school, and the monitoring function is in place, then ringfencing has little use. The current use of the ringfencing practice should probably be reassessed, and perhaps removed where it does not offer clear benefits. In some sense, ringfencing is an inefficient substitute for capacity development, perhaps tolerable in certain cases where capacity is extremely low and building it up would take too long and require too many resources, but it is not an ideal solution.

5.7 Developing management capacity for section 21 status amongst schools

Training packages for schools to improve financial management capacity have been developed at both national and provincial level. However, certain problems have been experienced around the quality or focus of these packages. Often, they are not explicitly linked to the shift from non-section-21 to section 21 status as laid down by policy. There have also been problems in the way in which PEDs and school managers have used these packages.

Assessing school capacity to manage functions

Apart from training, there is a need to improve the capacity of PEDs to advise schools on section 21 status, and to manage the process whereby school readiness is assessed and approval or non-approval is communicated to the school.

5.8 The problem of runaway water and electricity consumption

Waste not want not

Reports indicate that wasteful consumption of water and electricity in schools is rife. This occurs in two ways. On the one hand, it is common for communities surrounding schools to tap into the school's water and electricity supply for private consumption. On the other hand, schools tend to be wasteful in their own consumption of these resources, by, for instance, leaving lights on unnecessarily, using energy-inefficient heaters and not repairing leaking taps. It has not been possible to quantify the extent of the problem, but this can be considered sufficiently large to warrant some special attention.

Provide schools with mechanism to save

Accountability for water and electricity consumption at schools is low. It is not common for PEDs to inform schools of the amount of their utility bills. The PED will simply pay the bill and, in some provinces, deduct the amounts from the school's allocation. In other provinces, the deduction from the school's allocation works only in theory, and not in practice. Schools do not have enough information to be properly accountable. The problem is compounded by the politics surrounding, in particular, electricity cut-offs. PEDs are reluctant to use cut-offs as a means of

controlling excessive consumption, because of the especially bad publicity that goes with this, and, as a result, schools have little incentive to economise. Essentially, the current systems allow bad practice to continue unchecked for such a long time, that when the consequences eventually come to the fore in terms of excessive cost, it is practically and politically difficult address the problem.
Improving systems so that schools become aware, on a monthly basis, of what they have consumed and what it has cost them, is an obvious solution. However, getting schools to deal with monthly water and electricity bills might still not deal with the root of the problem, which is an inability to control consumption, so consumption may still be excessive. Some robust solutions to deal with the inability of schools to control their electricity consumption have been suggested. The installation of pay-as-you-go electricity meters in schools would deal directly with the control issue. The PED could, on a monthly basis, issue schools with recharge vouchers corresponding in value to a reasonable level of electricity consumption in the school. Reasonableness would obviously depend on school size, whether it was winter or summer, etc. If the voucher was used up before the end of the month, the school would have to recharge the meter using private funds, or endure a brief power cut until the end of the month. It is unlikely that brief cuts of this nature, so clearly linked to the school's own decision-making, would be condemned publicly or cause schools undue inconvenience. The benefits in terms of controlling electricity consumption, and thereby freeing up funds for other educational inputs, would be considerable. However, high capital investment costs and administrative complexity place serious constraints on the feasibility of this option .

A variation on the above solution, and one involving less capital investment and less administrative complexity, would be to explore with Eskom the possibility of rationing electricity supply centrally, so that Eskom would cut electricity after the monthly consumption limit had been exceeded and then to re-connect it at the beginning of the next month.

5.9 Recommendations

In order to improve the translation of budgets into inputs at the school, the following is recommended.

Organisational and systems improvements to support effective procurement of goods and services for schools

The Department of Education should:

Á In collaboration with PEDs, make systems interventions to vastly improve the current procurement and resourcing services offered to non-section-21 schools. These schools should be in a position to know what their allocations are, what is spent on them, and what the status is of orders placed by the school, partly so that management in the school can be improved and the groundwork laid for conversion to section 21 status. Creative 'out of the box' solutions should be explored to ensure that schools receive the service they require. Feedback and monitoring loops that allow schools to assess

the quality of the service that they receive, should be improved so that it becomes easier to identify where the most serious service delivery deficiencies are concentrated. Current systems interventions should be strengthened during 2003, and there should be an improvement on the ground by early 2004.

- Promote the roll-out of best practice emerging from past and current management intervention projects run in schools and in PED offices. The best management training materials in the areas of financing and resourcing should be identified, and should be made available more broadly. Where there are gaps, further materials development should be prioritised. The DoE should work with PEDs in ensuring that materials are optimally used, so that capacity to manage finances and resources in general is improved, in particular at the school and district levels. The DoE should have a better and a fuller set of management training materials for use in schools and PEDs available by 2004.
- Examine what the optimal service delivery functions of the PED with regard to procurement support are in the longer term, when a greater number of schools will have converted to section 21 status. This should feed into plans to improve the organisational effectiveness of the PEDs.
- Find solutions, in consultation with the National Treasury and PEDs, to the current problem of the inability of non-section-21 schools to save part of their school allocations for investment in equipment, whilst section 21 schools are able to do this. The necessary systems or regulatory changes should occur during 2003 and 2004.
- Actively explore and promote measures to deal with excessive water and electricity consumption in schools.

6

Influencing the prices of education inputs

Influencing factors that distort the market in order to eliminate excessive prices for school inputs, or negotiating preferential prices for schools on the basis of the size of the schooling sector, are ways in which the education departments could relieve resourcing pressures in schools.

6.1 The potential for lowering prices of inputs

Where schools, in particular section 21 schools, purchase goods, this is often not at bulk or wholesale prices, especially where each school requires only a few items. Goods like chalkboards, copiers, lawnmowers and administration computers are nevertheless purchased by a large number of schools in each district or province, often at the same point in the year. Section **Error! Reference source not found.** above discussed the need to examine more closely the envisaged future role of the PED with regard to section 21 schools. Such an examination would need to look at the possible integration of individual school orders into bulk orders, and the negotiation of system-wide open contracts, which would lower the price of inputs.

It has been suggested that education departments negotiate with individual large suppliers of goods and services to secure better prices for schools. An agreement with Eskom is about to be concluded for preferential electricity rates for schools. Similar agreements for preferential rates could be pursued with one or more telephone companies (where there are no fixed lines, many schools depend on the cellular telephone network for communication with the PED). Schools often rent photocopiers at the same rates that private firms would pay. This is another area that should receive attention.

Discounts for bulk buying

Where a PED purchases goods on behalf of non-section-21 schools, this is often not at the lowest price, especially where, according to Government procurement policy, SMMEs must be given special preference. Whilst Government must promote SMMEs, this was not intended to be at the cost of poor schools. This is a matter that requires much further detailed analysis.

6.2 Textbook production and supply in South Africa

Textbook a crucial resource

The price of textbooks warrants special attention, partly because textbooks constitute such a large portion of the state's expenditure on education (over R1bn per year currently), partly because textbooks are probably the most important input, at the margin, in producing learning achievement, and partly because of certain peculiarities in the textbook market.

Monopoly in textbook market

Though there has been no proper study into the matter, some views suggest that the textbook industry may not be sufficiently competitive, and that it is characterised by too many sole-supplier situations, to ensure competitive prices. Higher prices could allow producers to make abnormally high profits, or might simply sustain inefficient production processes. Thorough research is required on this subject to inform possible responses by Government to improve the competitiveness of the industry. Such a study might include an assessment of the relative costs of production in South Africa compared to those in other countries.

Inefficient state procurement distorts market

It has been argued that South Africa has excessively expensive textbooks as a result of the quality of paper used and the binding techniques employed. Whilst the consumers who have access to books may appreciate these aspects of the books, the high prices that result make it more difficult for Government to make books more widely available. Many developing countries at levels of economic development similar to that of South Africa make do with textbooks of much lower quality paper, printing and binding. It has been estimated that the price of textbooks could be lowered by 20% through the use of lower grade paper, standardisation of formats, and bigger print runs. Obviously, the trade-off between quality and the lifespan of books needs to be carefully considered in any drive to reduce prices. Whilst the lifespan of books can be improved through better preservation of books (see section **0** below), certain, but not all, qualitative aspects of each textbook assist in lengthening its lifespan.

Standardise in order to lower cost

Standardisation of formats and bigger print runs imply better and probably national coordination in the contracting process. The current fragmented approach, whereby nine provinces and, often, individual schools, purchase textbooks in an uncoordinated fashion, provides greater variety, but fewer economies of scale, and therefore higher prices. Moreover, the fragmented way in which demand for textbooks is currently structured is very conducive to monopolistic and sole-supplier situations. The lead time for the production of a textbook is long, and this fact has been inadequately factored in when the roll-out of new learning programmes takes place. The schooling system pays for tightness of implementation deadlines through higher textbook prices.

To the suggestions in section **Error! Reference source not found.** above on how to improve the resourcing services offered to schools, we should add the suggestion that the DoE play a stronger role in influencing textbook demand and supply. As a minimum, this involves better and ongoing communication between the departments and with the textbook industry. Options such as a nationally determined core set of books should not be excluded.

6.3 School uniform determination and cost

Keep costs of uniforms affordable

The cost of school uniforms has been receiving a great deal of attention in the media. Whilst there is little expectation that the state should cover this cost, it is in the interests of the state to ensure that the cost of uniforms is kept as low as possible, while still responding to credible

motivations for uniforms. High uniform prices cause an undue financial burden on households, and impact negatively on the ability of households, especially poor households, to provide for their children.

There are essentially two factors that potentially contribute to an escalation of school uniform prices. One factor, related to the workings of the market, is perhaps relatively easier to influence as it relates to the choices and policies of schools, but the other factor, linked to deeply entrenched traditions, attitudes, values and norms, would require public debate and awareness-raising to influence.

Cottage industry for uniforms

School uniform production is inherently a lot simpler than, say, the production of textbooks. School uniforms can even be produced in the home. However, the specifications that schools set for their uniforms may make it difficult for a variety of suppliers to compete with each other and lower the price. The specifications may include specialised items, like school emblems, that make it costly for every supplier in an area to satisfy the demands made by each school in the area. Often the specialisation is such, that it becomes impossible for the 'cottage industry' to satisfy the demand. This then leads to a one-supplier situation, which raises the price. There are also possibly illegal factors that influence uniform supply. There have been accounts of school principals receiving kickbacks in exchange for insisting that the school uniform may only be purchased from a particular supplier.

Uniforms as an equaliser and cost saver

The factor related to traditions, attitudes, values and norms is a more complex one to understand. The motivation for adopting a particular school uniform is often grounded in tradition and is rarely explicitly articulated. Schools focus on achieving a particular appearance that often includes a tie, blazer and white shirt , lace-up leather shoes, pants, and a skirt or tunic. The specification for each of these items varies widely between schools and some schools also insist on different uniforms for summer and winter and for sporting activities. Despite the apparent efforts to specify specific uniforms for different seasons, uniforms are very often not appropriate for the climate of the area. Uniforms that are excessively expensive could, in most cases, be replaced by less costly items through an alteration of the specifications and/or the range. The cost of maintaining the uniform should be added to the cost of actually buying the uniform, as the specification of the uniform has a direct impact on the frequency of washing and ironing required. It should be remembered that 30% of South African households do not have electricity. Particularly for poorer households, it is not uncommon for learners, especially girls, to devote a lot of time to the maintenance of school uniforms. This is often at the cost of time spent on school homework.

Extravagant or basic uniform?

The various traditions of school uniforms in South Africa have been shaped by our history. There appears to be a tendency to equate elaborate and, consequently, expensive uniforms with educational quality. Although uniformity of dress code has the potential to remove the visibility of class differences within schools, the alienation of poor learners who cannot afford to acquire the school uniform tends to be exacerbated. In addition to being an important economic issue, uniforms

are also a significant curriculum issue because of the images and messages they project. It is clear that the high costs of uniforms are a problem that requires urgent and purposeful attention. It is also clear that the question of uniforms is a complex one. We believe, therefore, that the solutions to the problem will have to be carefully considered and consulted upon. The practice of adopting a traditional school uniform has widespread support in South Africa, even amongst the poor. In one reported case, a school considered the uniform sufficiently important to warrant expenditure from the school fund on clothing to ensure that poor learners complied with the uniform policy of the school. It is perhaps for this reason that none of the provinces has ever adopted a policy that would move towards fundamental change with regard to uniforms.

The pricing behaviour in the market is not easy to gauge. Current research does not provide a full picture of what causes what. However, conservative estimates indicate that school uniforms are twice as costly as they would be if the market worked well, and if schools did not specify unnecessarily elaborate uniforms. The cost of equipping a learner with a uniform is anywhere between R700 and R2,000. The demand placed on poor households is often such that 20% of the total income available for a child has to be spent on the school uniform. This is unacceptable and must be addressed with urgency.

The nature of the problem suggests that solutions can be broken down into short-term and long-term solutions.

Restrictions to free trade in the uniform market?

- In the short term, the DoE and PEDs need to ensure that monopolisation of uniforms by local suppliers is broken. The easiest way to do this would be to insist through policy that all uniform specifications determined by schools should allow parents to buy the items in a competitive market, or to produce the items at home with minimal specialisation. In other words, schools would be allowed to continue to maintain fairly 'classical' school uniforms if they so wished, but the clothing would have to be available at competitive prices and should be relatively easy to produce at home. Some standardisation could be brought about, for instance to eliminate costly transitions from primary schools to secondary schools. This seems feasible, though the impact of the solution depends on factors like (1) how many schools currently make use of sole supplier uniforms, (2) how responsive the market can be expected to be to a narrower range of specifications, yet a situation in which much variation from one school to another would continue, and (3) how resistant schools with sole-supplier uniforms would be to a change. Point (2) implies some market analysis, although the matter here is a lot simpler than in the case of textbooks, owing to the nature of the product. Engagement between the DoE and the clothing industry would be very valuable to the exploration of possible solutions.

- Long-term considerations should begin to influence current work insofar as the possible introduction of an inexpensive standard uniform is concerned. Other developing countries do use a simple and standard national school uniform to make it easier for the poor to clothe their children. Experiences in such other countries should

begin to inform the debate in South Africa, where, standardisation could occur nationally or provincially.

6.4 Recommendations

The following recommendations are made with regard to lowering the prices of inputs.

Negotiations and systems to lower the prices of school inputs

The Department of Education should:

- Influence the systems and practices according to which section 21 and non-section-21 schools purchase goods, with a view to lowering the prices of these goods. Options such as open contracts negotiated by Government, of which schools could then make use, should be explored.
- Continue to engage with large suppliers of goods and services that all schools require, such as electricity, copiers and telecommunications services, with a view to securing preferential prices for schools. Key negotiations in this regard should occur in 2003 and 2004.
- Look into ways of addressing the problem of high prices that non-section-21 schools pay owing to the procurement policies of Government and individual departments.

Measures to lower the price of textbooks

The Department of Education should:

- Work together with the Department of Trade and Industry in conducting research into the textbook industry, with a view to identifying key Government interventions and Government-to-business partnering that can ensure a reliable supply of affordable textbooks to the schooling sector. The trade-off between quality, price and durability of textbooks should be carefully assessed as part of the study. The outcomes of this research should be available by 2004.
- Strengthen formal and ongoing lines of communication with stakeholders in the textbook industry so that matters of mutual interest can be fully explored.
- In collaboration with PEDs, bring about a better national coordination of the textbook ordering process, so that some standardisation in textbook specifications and a more appropriate timing of orders can ensure a more reliable, and less costly, supply of textbooks.
- Continue to negotiate favourable prices of inputs for schools with other industries, especially where schools consume large quantities of those inputs, as is the case with electricity, rented copiers and telecommunications services.

7

Preserving physical assets in schools

Preservation of school equipment

Many education inputs, including inputs that are commonly regarded as 'recurrent' in accounting systems and in policy, have a potential lifespan of several years. Copiers, textbooks, wall charts, library books and many items of stationery, such as rulers and geometry sets, can all potentially be used for many years. However, systems are required to ensure, firstly, that these goods are continually placed with people who currently need them and, secondly, that their lifespan is maximised through proper care and, where required, maintenance. Schools, like hospitals, private businesses, and many other organisations, often experience serious problems in this regard. The relationship between poor preservation of assets, on the one hand, and quality of outputs and budget pressures, on the other, is hard to quantify, but we can be certain that inadequate systems for preserving our physical assets currently compromise the quality of schooling substantially.

7.1 The need for proper asset management in schools

For most schools in the country, ownership of all assets purchased with state funds still rests with the state. It is only in the case of section 21 schools, which are still a minority of all schools, that ownership of moveable assets, but not of immovable assets, has been transferred to the juristic person of the school, as determined by SASA. As more schools obtain section 21 (and in particular, section 21(a)) status, more ownership will be transferred to schools.

The PFMA determines the responsibility that the DoE and PEDs have in accounting for their assets, which, in the case of PEDs, includes all assets in non-section-21 schools and all immovable assets in section 21 schools. The current budget reform process, spearheaded by the National Treasury, focuses on improvements to this accountability function.

Care of property

The Government Notice 'Transfer of funds and other moveable assets of the State in public schools' (Notice 1423 of 1999) lays down the framework according to which the state and the school agree to what assets are transferred to the school when a school assumes the relevant section 21 status. From that point, accountability for all the movable assets at the school, even those purchased with state funds, rests with the school. Financial directions, issued by the PED in terms of section 37 of SASA, determine how accounting for assets takes place in the school. Some provinces have issued comprehensive directions to this effect on the basis of a pro forma regulation produced by the DoE. Other provinces are still in the process of finalising these financial directions.

Control of property

The basic legislative and accountability framework required for proper management of school assets is almost in place. A challenge is to ensure that this framework is used for proper registration and tracking of physical assets in schools. Another challenge is to ensure that schools are equipped with the physical infrastructure required for the proper preservation of assets. Only 30% of schools currently have storerooms, which makes proper control over assets like textbooks and science equipment difficult. Whilst many schools are able to operate libraries in the absence of a dedicated physical space, having the proper facilities makes it easier for a school to ensure that items do not go missing.

Moreover, while PEDs may have drafted the regulations or directions, it is not clear whether every province has the necessary systems for properly accounting for the assets which each PED has to manage, or simple systems that the PED could provide to section 21 schools that are now responsible for managing certain assets. The provision of simple, pencil-and-paper asset tracking systems, based on standardised pro formas and notebooks, and training on how to use them, would be a good start.

It is moreover important to ensure that accounting for assets occurs as part of a larger process of sound management of assets. Purchases of assets such as chairs and tables should be informed by information about the trade-off between durability and price. The DoE and PEDs should assist in providing this information. Incentives need to be developed to encourage non-section-21 schools to preserve all assets. In fact, the ability to reduce theft, vandalism and simple misuse of state assets should be made a very explicit part of the conditionality for acquiring section 21 status.

7.2 Textbook retrieval rates

Textbooks will again receive special attention because of the importance of the matter. It is not accurately known what a poor textbook retrieval rate costs the country, but it is safe to assume that a large amount of money is lost in this regard. , Although the ideal is a textbook retrieval rate of 100%, a 1999 estimate put the figure as low as between 40% and 50%.. Textbooks should only be removed from the stock held by schools when the content becomes redundant, or when normal wear and tear on a textbook makes it necessary to write the textbook off.

Extended life of textbooks

It should be remembered that because textbooks are expected to last for several years, a low retrieval rate has an impact on the total stock of textbooks and on the ratio of textbooks to learners, and this ratio is somewhat worse than what the non-retrieval rate might suggest. In a stable system, if investment in textbooks each year is R1 billion[elsewhere you had “R1 bn” – please standardise], and if we assume that each book costs R50 and has a lifespan of four years, the schooling system should have a continual stock of about 80 million textbooks at any point. This allows each learner in a 10 million learner system to have eight books. The assumption is that no textbooks are lost

through non-retrieval. If we now assume that the retrieval rate is only 50%, then the sustainable stock of books is reduced to about 37,5 million, and the number of books per learner decreases to 3.8. Targeting good retrieval rates should be a top priority, to reduce costs and to ensure that more learners have access to textbooks.

Non-retrieval of textbooks

The problem of low textbook retrieval rates is compounded by the movement of learners between schools. It is illegal for a principal to withhold a learner's report card when the learner leaves the school as a means of obliging the learner to return the school's textbooks. This means that the cost to learners and parents of not returning books to schools from which learners move, is not high. Improvements to current control systems should include ways of forcing learners who move from one school to another to return books to the previous school. Controls at the level of individual schools, and at the system level, are therefore required. There is currently no proper national framework or system to turn around the high textbook losses in the schooling system. It has been proposed that the Learner Records System currently being spearheaded by the DoE should include information on textbooks issued to learners and on textbooks returned. It should be possible to pick up the fact that a learner owes books to a school, and ultimately the state, wherever that learner is in the system. It has also been proposed that each textbook issued by the school should carry a clearer identification tag, so that it is clear which school issued a textbook and so that a learner is not able to return a textbook stolen from another learner as his or her own.

The pursuit of good textbook retrieval rates should be an integral part of good school management, and should be linked to the granting of section 21 status, as well as to Whole School Evaluation.

7.3 Recommendations

The follow recommendations are made to improve the preservation of physical assets in schools.

Improved asset management systems in schools

The Department of Education should:

- Continue to strengthen accounting procedures, including procedures for accounting for physical assets, throughout the education system, in line with the PFMA, the budget reform process and SASA. Systems that will allow for the easy maintenance of stock registers should be improved. Such improved systems should be more broadly available by 2004.
- Strengthen the capacity of schools to preserve assets through the improvement of storage facilities, better asset management and a general culture of care for the property of schools amongst learners, parents, and educators. Incentives for good asset management should be put in place, and advocacy campaigns around care for school property should be launched.

Systems for higher textbook retrieval rates in schools

The Department of Education should:

- Set up better monitoring systems to gauge the ongoing cost of poor textbook retrieval for the system as a whole, and for particular provinces and localities. These systems should be in place by 2004.
- Look into the design of a system-wide mechanism to track what materials have been issued to which learners, and which learners still owe materials to schools, regardless of where learners migrate. This investigation should be completed during 2003. New mechanisms for better textbook retrieval, whether system-wide or more localised in nature, should be put in place in schools during 2004.
- Integrate good textbook retrieval rates (and good asset management in general) into the Whole School Evaluation process and eligibility for section 21 status, to a greater extent than is currently the case.

8

Respecting basic human rights

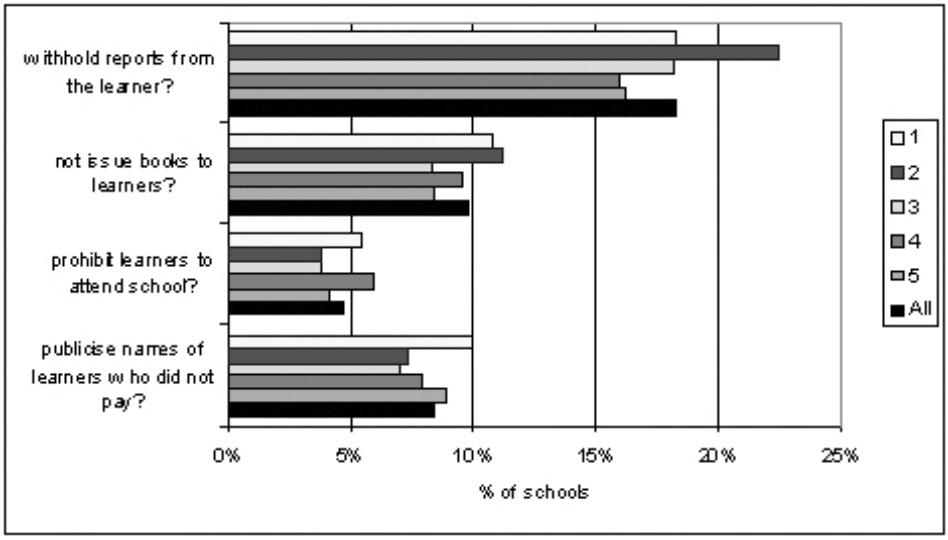
8.1 The marginalisation of the poor

Denying access to poor learners

The poor are marginalised in many ways. They are marginalised by their lack of access to resources, and by the rest of society, who tend to see the poor as a threat. Demands by schools for private inputs exacerbate this marginalisation. When the poor cannot afford certain items, such as stationery, they must often do without those items. When the poor do not pay school fees, those who can pay fees view them as a threat. Considerable media attention has been given to practices in schools that are truly horrifying, as well as illegal. Poor learners whose parents could not pay the school fees have been turned away from school, placed in separate rooms, away from the other learners, forced to sit on the floor, named and shamed in the school assembly, and so on.

Some remarkable and worrying statistics from the 2001 Systemic Evaluation are presented in the following graph. School principals were asked what practices they employed when parents did not pay fees.

Figure 12: Illegal marginalisation of learners by quintile (2001)[12]



What is striking, is that the practices shown in the graph take place across all school quintiles. The problem is not just a poor school or a rich school issue. Given that the practices are all illegal in terms of SASA and

[12] Data source is the 2001 Systemic Evaluation. Respondents, who were principals, had to answer Yes or No to particular questions on what the school did if parents did not pay school fees. The bars indicate percentage of respondents with valid responses, who said Yes.

the country's Bill of Rights, we can safely assume that the figures under-represent what is really happening in schools.

Non-compliance with policy

On the one hand, we are dealing with a problem of policy compliance. However, the extent of the problem suggests that there is also a serious cultural and attitudinal problem that must be dealt with. Awareness of what human rights are - in particular, the rights of the most vulnerable in society, including the poor and disabled - is clearly at an unacceptably low level.

Correct procedures in the schooling system must be enforced, and it is important for the state to resource poor schools adequately, but this cannot deal with the whole problem. There is a need for a fundamental shift in the way in which many education managers and parents view the poor, the country, nation building, transformation, and so on. The recommendation in the next section flows from this. The recommendations in section 10 below deal with the other issues of resources and school procedures, and are obviously also intended to counteract the marginalisation of learners.

The discussion in this section begs the question of whether school fees should simply be banned in schools, or perhaps in poor schools only. This matter is dealt with in depth in section 10, and in particular in 10.2.9.

8.2 Recommendation

The following is recommended to improve respect for human rights in the schooling system.

Campaigns, education, and prosecution to reduce the marginalisation of poor learners

The Department of Education should:

- Complement resourcing and systems changes that benefit the poor, with more campaigns aimed at changing the way in which actors in the schooling system view each other and, in particular, the way in which they view the historically marginalised. Current campaigns and programmes in the media focussing on education should, therefore, more explicitly tackle the problem of the marginalisation of poor learners in schools.
- More actively and visibly counter the illegal and unfair marginalisation of poor learners in the system, through the prosecution of employees if necessary.

9

School nutrition

9.1 The demand for school feeding schemes

For the DoE and PEDs, school feeding programmes are a high priority matter. The provision of school meals by the state impacts positively on education, in two ways. Firstly, well-nourished learners perform better in the classroom. Secondly, school meals are an important incentive for poor parents to ensure that their children attend school every day.

Learning on an empty stomach

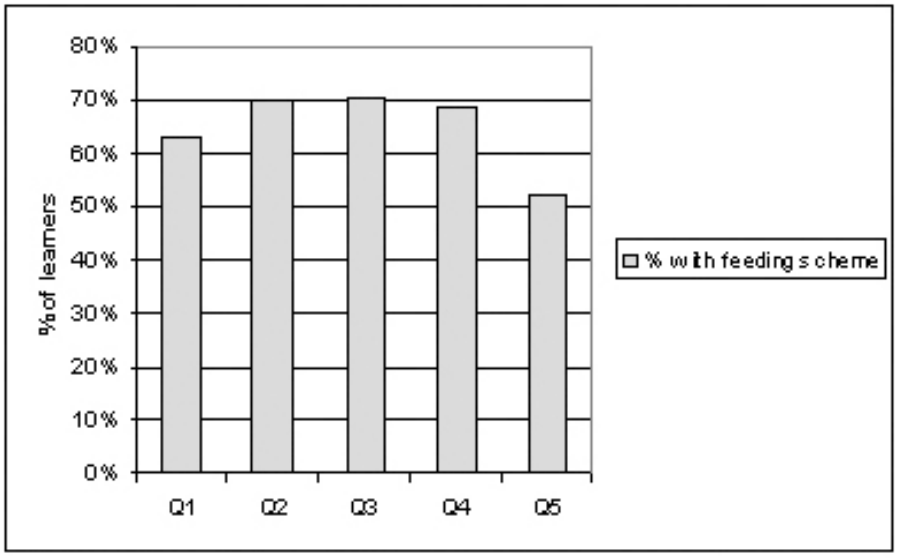
There is not much recent research into what the trade-offs are with regard to school feeding, and what the impact is on learner performance. PEDs and the public are currently showing significant interest in the expansion of current school feeding schemes from the lower GET grades to all GET grades.

9.2 Current food status in schools

Extension of school nutrition project

Despite much organisational failure, covered extensively in the media, with regard to school feeding schemes, these schemes have intermittently succeeded in reaching a great proportion of learners. In 2001, the Department of Health reported that a budget of over half a billion rand allowed to the state to reach 4.7 million learners in 15,000 schools. The following graph, based on data from the Systemic Evaluation sample of Grade 3 learners, confirms that coverage has been considerable. What the graph does suggest, however, is that there could be a coverage problem in poorer schools, which might be linked to a greater degree of organisational failure in poorer provinces and districts. Ideally, coverage should increase with poverty, so quintile 1 should have the highest coverage.

Figure 13: Percentage of schools with feeding schemes (2001)[13]



The data in the graph is for 2001. In 2002, considerable organisational problems in the Eastern Cape and KwaZulu-Natal reduced coverage somewhat, but efforts to address these problems are expected to result in a resumption of at least the 2001 coverage during 2003. Part of the improvement process is a more strategic sharing of the responsibility for public feeding schemes between the health and the education authorities.

Quality of food

The DoE has placed increasing focus on the quality of meals offered in school feeding schemes. The bread and peanut butter meal is considered inadequate, and should be replaced by a nutritionally complete, solid meal.

Support for school feeding schemes at the school level is reflected in the fact that a number of schools have raised funds to run their own feeding schemes, where coverage by the state was considered inadequate. Moreover, some schools have started growing their own vegetables in order to improve the nutritional value of school meals. This kind of shared ownership of school feeding schemes between the state and local communities should be regarded as a powerful means for overcoming some of the organisational problems that we have seen.

9.3 Recommendation

The following is recommended with regard to the nutrition of learners.

[13] Source is the 2001 Systemic Evaluation. The values reflect percentage of schools per quintile with feeding schemes in 2001. Importantly, quintiles here is determined by school fees, so the relatively low value for Q1 means that coverage by school feeding schemes in schools with the lowest fees was not as good as coverage in schools with slightly higher fees. Other data suggests that school fees paid are a relatively good proxy for the income of parents in determining poverty quintiles.

School lunches for all poor GET learners

The Department of Education should:

- In collaboration with health and education authorities at the national and provincial levels, investigate ways of avoiding the organisational and management problems of the past with regard to school feeding schemes. A comprehensive plan for the improved management of school feeding schemes should be produced during 2003.
- Improve our knowledge about what kinds of school feeding programmes work best in South African schools, and the way in which it impacts on learner performance. Research in conjunction with the Department of Health should be undertaken in this regard during 2003.
- Promote school ownership of school feeding schemes, for instance through school vegetable gardens.
- Work towards a target of ensuring that, as a minimum, all GET learners whose families cannot afford to provide them with adequate food, receive a full and nourishing school lunch every day.

10

National Norms and Standards for School Funding

The National Norms and Standards for School Funding were the result of intensive analysis and broad discussions with the whole range of stakeholders. The policy represented a breakthrough insofar as it was the first schools resourcing policy to prescribe a redress approach that is formula-based, non-racial, tackles the whole spectrum of poverty rather than drawing an arbitrary line, and does it on an ongoing, permanent basis and across a fairly wide spectrum of inputs. Although the policy focuses strongly on non-personnel recurrent resources, e.g. LSMs, stationery, non-educational supplies and maintenance, it also refers to the need for the education departments to distribute other education resources progressively, i.e. with a positive bias towards the poor. The policy governing the provisioning of teachers was in fact amended during 2002 so that the poverty weightings specified by the Funding Norms and Standards for non-personnel resourcing, could also be applied to the progressive allocation of teachers.

Assessing the implementation

Implementation of the Funding Norms and Standards began in 2000. We can therefore assess the effectiveness of policy design on the basis of experiences during only two full school years. Given the difficulties of effecting any system changes in a schooling system as large and complex as the South African one, gauging the appropriateness of policy design after just two full years clearly has its limitations. In the case of the Funding Norms and Standards, there have been both successes and cases where bureaucratic information systems and human capacity hindrances have seriously diminished or subverted the policy's impact. Certain problems in the original design of the policy have been picked up, and these will be discussed below.

This section deals with two particular Funding Norms and Standards matters: the determination of the school allocations and school fees. Other Funding Norms and Standards matters are dealt with elsewhere.

10.1 School allocations

10.1.1 The National Norms and Standards for School Funding on school allocations

What the Norms fund

The Norms and Standards require each PED to set aside a budget for 'non-personnel recurrent' expenditure in public ordinary schools. Items to be covered by this budget include clearly recurrent items, such as electricity and exercise books for learners, as well as items that are less clearly recurrent due owing their longer lifespan, such as textbooks and equipment. Moreover, the budget is meant to cover non-emergency repairs to buildings.

Poverty ranking and progressive funding

The PED is required to rank schools according to poverty, defined by conditions within the school as well as in the surrounding community. PEDs must then divide the non-personnel recurrent budget up amongst schools in such a way that the first, second, third, fourth and fifth quintiles of learners (from poorest to least poor) receive, respectively, 35%, 25%, 20%, 15% and 5% of funding. The distribution formula may be changed somewhat to cater for specific provincial distributions of income and poverty. In addition, a smoothed curve is advocated in order to avoid sudden jumps in funding between one school and the next on the resource targeting list.

Transfer of allocation to school fund

The resultant school allocations can basically be distributed in one of two ways. Schools with section 21 status, obtained on the basis of satisfactory financial management capability, receive the allocation as a transfer into the school's bank account. Non-section-21 schools can determine the usage of the allocation, subject to some restrictions, although the PED manages the account on their behalf, and provisions the school with inputs rather than transferring cash to them.

10.1.2 Items covered by the school allocations

Specifications and recommendations around what inputs are covered by the school allocations distributed by the resource targeting list of the Funding Norms and Standards need to be tightened up. Consistency between provinces, and between schools in individual provinces, is often lacking, which can cause equity problems. Moreover, it is not always clear that the routes taken by PEDs are optimal.

Categories of allocation need to be clarified

The Funding Norms and Standards policy provides a fairly high-level breakdown of what categories of items should be covered by the school allocations, and what the rationale is for this. However, there has been some confusion, partly because the Norms and Standards makes reference to the inherited chart of accounts, which has changed since the Norms and Standards were written. As an example, PEDs have attached different interpretations to what the policy refers to as 'small capital equipment'. Interpretation problems surrounding the chart of accounts are not limited to the Norms and Standards or to the education sector. An important component of the national budget reform process is greater uniformity and clarity across Government as a whole in the accounting process.

Locate spending decision at the right level

The determination of what constitutes adequate school allocations, and what the pro-poor distribution of these allocations should be, depends heavily on what items are meant to be covered by the allocations. There are good reasons for norming the specifications at national level, especially if questions of adequacy and the progressive distribution of funds are dealt with nationally. A uniform system of classification will also assist with budget and expenditure analysis.

A few pointers regarding optimal specifications will be mentioned here.

There are essentially two criteria determining whether an input should be covered by the school allocation. Firstly, if a well-managed school is able to purchase the item in the right quantity, and at the right price, then

there is good reason to let the school allocation cover the item. (If the school is not well managed, it should be the responsibility of the PED to purchase the item on behalf of the school.) Secondly, if it is important that the standard pro-poor distribution curve (benchmark 35-25-20-15-5) be applied to the resourcing of the item, then the school allocation is the appropriate financing route. A third point can be added, and that is that there needs to be some synergy between what the school allocations buy, and what SASA says about ownership of moveable and immovable assets (see **Error! Reference source not found.** above).

Purely recurrent items include writing paper, pencils, paper for the copier, toilet paper, computer consumables, electricity, transport, cleaning materials and light bulbs, amongst other things. The Norms and Standards states that where these items are required for routine maintenance and cleanliness (cleaning materials and light bulbs are specifically mentioned in this regard), private contributions by the school community should cover the cost. This is to promote a sense of ownership in the community of the school's physical infrastructure. This means that items like cleaning materials would not be taken into account when the adequacy of the school allocation is assessed. However, enforcing non-usage of public funds for cleaning materials is almost impossible in the long run, given the mixing of public and private funds in section 21 schools.

Need for correct classification of expenditure items

New moveable assets include new chairs, desks, copiers, computers, laboratory equipment, lawnmowers and so on. Importantly, textbooks, library books and some stationery (like staplers) also constitute moveable capital assets, even though they are not commonly viewed in this way. (It could be argued that the way we view textbooks, as non-capital goods, is part of the problem leading to poor textbook retrieval rates.) Although the Norms and Standards specifies that only 'small capital equipment' should be covered by the school allocation, it may not make much sense to differentiate between 'small' or 'large' in this regard. And if we do make a distinction, it is important to clarify this. However, given that schools will become the owners of all moveable assets in the long run, it is probably optimal to ensure that the school allocation covers all moveable equipment, from computers and photocopiers down to staplers.

Replacement of and repairs to moveable assets are necessary, as learner chairs fall apart, copiers break, etc. This is not explicitly dealt with in the Norms and Standards, although the implication is that the school allocation should cover this.

Improvements to immovable capital items include replacing door handles and window panes and repairing broken ceilings and toilets and leaking taps. The Norms and Standards specifies that this should be covered by the school allocation, although, as with cleaning materials, 'minor' repairs are specified as the financial responsibility of the school community. Again, this means that minor repairs would not be factored into calculations of adequacy, although it would be necessary to gain clarity around what would be a non-minor repair that the school allocation should cover. Emergency repairs, according to the policy,

clearly fall outside of the scope of the school allocation, and are the responsibility of the PED.

Funding capital equipment according to backlog?

There is a problem in the fact that schools do not have an equal stock of movable and immovable assets to begin with. Ignoring classroom shortages for now, schools have buildings that are of varying quality, from completely unfit for usage to excellent, and schools are not equal in terms of their inherited stock of state-supplied copiers, science equipment, etc. This is due, to a large degree, to the apartheid backlogs, and the inequities in this regard are serious. There are two ways of dealing with this problem. One is to say that the pro-poor distribution of the school allocation deals with the need of disadvantaged schools to catch up in terms of equipment and quality of buildings. The other is to say that the state should ensure, separately from the school allocation, that schools are given a more or less equal point of departure, in particular when moveable assets are transferred to the school as part of the section 21 declaration process. The two approaches are not mutually exclusive. If the first approach is followed, it would be important to monitor the capitalisation of the school so that the school does not benefit longer than it should from the backlog top-up. Once the school had bought a copier, replaced all broken furniture, and so on, its funding needs would change. Thus it should be based on an audit of actual need.

The analysis of the school allocations in the Report is informed by the points made above. Clearly, fine-tuning of the analysis and recommendations is dependent on the fine-tuning of the key issue of what items should be covered by the school allocation.

10.1.3 Adequacy of current allocations

Ideal method of calculating adequacy

Ideally, adequacy of state funding should be measured in terms what level of resourcing is required to attain a particular level of learner performance, on average. This would require more technical research, on the relationship that exists between costs and learning, or between costs and parental satisfaction, than has been done up to now in South Africa. Currently, notions around adequacy must necessarily be somewhat subjective, and they would be influenced by the following factors:

- Assumptions about what the state should provide, and what the household should provide. For instance, is it the household's or the state's responsibility to provide school lunches? Can the same criteria be used for poor and non-poor learners?

- Assumptions about what is a reasonable level of resourcing. Here observations about one's neighbours are important. If neighbouring schools have expensive sporting equipment, for instance, it is more likely that a school will regard such equipment as part of a minimally adequate package of resources.

Turning specifically to school allocations, notions of adequacy are also informed by what goods and services the allocations are meant to include, and what would be provided as an additional input, either by the

PED or by some other Government department, like Public Works or Health. Currently, there is a lot of variation between schools in this regard, even within the same province. Moreover, the system is unstable. For example, the extent to which the Department of Public Works is able to maintain infrastructure in the medium term is often unpredictable, and dependent on planning processes outside the control of education planners.

Determine an adequate amount for basic education

Whilst it is important to realise the difficulties, especially given current knowledge about the system, of pinning down adequacy in state funding, it is clear that some assessments, however flawed, need to be made. Section **0** above provided some statistics on school allocations in different provinces. Currently, many poor schools in the country receive allocations that are worth as little as R50 per learner. However, in a few provinces, allocations in poor schools are worth over R400 per learner. It has been argued that both levels of funding are inadequate, but clearly a R50 allocation per learner represents a more glaring problem than, say, a R450 allocation.

Ringfencing or free-ranging?

Because of the ringfencing of portions of the school allocation, the question arises of how adequate state funding is for particular items. Both schools and PEDs report that the extensive attention and protection that have been given to LSMs, has resulted in a situation in which funding for LSMs is regarded as more adequate (or less inadequate) than funding for other non-personnel recurrent items in the school, like electricity, minor repairs, and so on. However, even LSM funding is clearly inadequate in many provinces. One province ringfenced an amount for LSMs of only R39 per learner in 2003, which is well below the R100 per learner benchmark for LSMs stipulated by the Norms and Standards. (This benchmark, which is in 2000 rand terms, is the only absolute monetary norm set by the Norms and Standards.)

Inadequacy

There is a general sense in schools and amongst provincial planners that the school allocations are inadequate, at least in the bottom four quintiles. The arguments change somewhat for the fifth quintile, owing to the enormously increased capacity of households to make private contributions, but more on this further on. Inadequacy of funding is most pronounced for non-personnel recurrent items other than LSMs. Importantly, provincial planners see budgets and resourcing processes, rather than the policy itself, as the main problems contributing to inadequate funding levels.

10.1.4 Production functions and costing a basic minimum package

Productive use of inputs

A costed norms approach to the funding of social services has been the subject of intense debate in South Africa. The Financial and Fiscal Commission (FFC) has been investigating the feasibility of this approach for South Africa for several years. This approach often implies taking ‘production functions’ for the ‘production’ of education, health, etc. The function, or formula, tells us what level and mix of inputs we need, given a particular context, to produce a particular output or, in the case of education, level of learner performance. Having the formula, one can ‘plug in’ a desired level of ‘output’ (such as extent of success on an assessment) and come up with an estimate as to the likely level of

resources needed. Of course, this is a highly simplified presentation of the approach; in reality it is more complex than this and actual production functions are seldom used in this way. Importantly, having production functions is useful even if Government does not follow a costed norms approach to funding social services. With the current budget-driven approach to the funding of education, production functions can tell us what level of outputs we can expect to achieve given the budget. This kind of knowledge would be of enormous value in assessing efficiency and performance in the system at provincial, district and school levels.

Not a panacea

The DoE has been in contact with local and foreign universities with regard to research into production functions applicable to South African schooling, and it is the intention of the DoE to conduct this kind of research in the country. However, production functions should not be seen as a panacea to education planning. Production functions cannot explain everything in education. Moreover, there is a lot we can say about adequacy and the links between inputs and outputs even in the absence of production functions. Currently, there are schools that perform well despite the fact that they suffer deplorable physical conditions, learners come from poor households, and the teachers have average qualifications. It can therefore always be argued that even in the absence of what would normally be regarded as adequate circumstances, the possibility exists of providing learners with a good education. Closely linked to this argument, is the argument that minimally adequate resourcing in schools strongly determines whether conditions would be enabling for effective learning and teaching. The impact of basic adequacy of resource inputs on the dignity of learners, communities and educators is a strong moral argument that must be emphasised. In other words, even in the absence of an economic efficiency argument, learners require a pleasant learning environment as a basic right.

Costed minimum package

A more short-term objective for the DoE than the formulation of production functions, is the formulation of a set of costed minimum packages for schools. The DoE has begun dealing with this problem through the definition of a basic minimum package of inputs. The package is informed by what relatively well performing but poor primary schools currently utilise in terms of non-personnel recurrent inputs. In the translation of the package into monetary cost, various price levels, depending on rurality of the school, and availability of economies of scale, are taken into account. The result is a minimum package differentiated in terms of price by a few basic price variables.

Soft norm

The DoE plans to integrate the costed basic minimum package into planning and budgeting processes, from the national level to the level of the school. It is hoped that this will introduce more realism into the budgeting process. Moreover, the minimum package could inform a national resource targeting list approach, if such an approach is adopted. The costed minimum package is probably best regarded as a benchmark for adequacy and as a ‘soft’ norm, rather than a hard norm that would be enforced through policy. Experience has shown that hard norms tend to undermine a holistic approach to budgeting, as targets for particular expenditure items become ends in themselves, often to the exclusion of

important questions around budgetary trade-offs and the total size of the envelope.

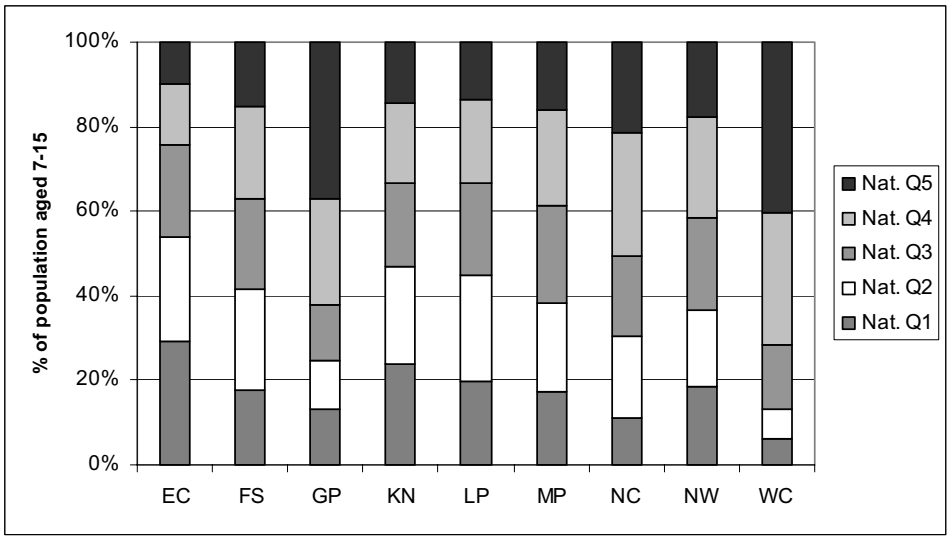
Constitutional obligations around the offering of a basic education for all learners inform the current GET focus of the costed minimum package. However, it would be important to cost a minimum package for the FET band in schools too, to improve budgeting for secondary schools.

10.1.5 Unequal poverty across provinces

Equality between equals

Each province has a different average income, and a different income distribution curve, whether one considers household or person as the unit. This means that the poorest quintile of learners in the Eastern Cape, for instance, will not have the same poverty profile as the poorest quintile of learners in the Western Cape. A poverty-ranked list of school-age children was obtained from StatsSA's 1999 October Household Survey, and this list was used to examine the relationship between national and provincial poverty quintiles. The following graph shows how the national poverty quintiles are distributed within provinces.

Figure 14: National quintiles within the provinces[14]



The comparison between the Eastern Cape and the Western Cape illustrates how different the provinces can be. Learners in the national quintile 3 are in very different places in the two provinces. In the Eastern Cape, they occupy above all provincial quintile 4 (between the 60% and 80% levels – horizontal lines in the graph indicate the boundaries between the provincial quintiles). In the Western Cape, these learners span the poorest and second poorest quintiles. In other words, a median learner in the country in terms of income would be considered 'close to rich' in the Eastern Cape, yet definitely poor in the Western Cape.

[14] The values in this graph were obtained from an analysis of StatsSA's 1999 October Household Survey data. All children and youths aged 7 to 15 in the sample were ranked according to household income. They were then each placed in a national and a provincial quintile. Weights developed by StatsSA applicable to households to compensate for sample bias were used in the determination of quintile.

It has been asked whether it would not be better to allocate non-personnel recurrent resources according to a national resource targeting list approach, as opposed to the various provincial approaches. A national approach would ensure that equally poor learners in different provinces were funded equally. The remainder of this section on school allocations will largely be a consideration of a national distribution model.

Equally poor across country to be treated equally

A qualifying remark needs to be made at this point. The frequently observed disparities in the allocations made to equally poor learners in neighbouring provinces are the result of two factors. On the one hand, the average level of allocations in one province could be considerably lower than in the other. On the other hand, each province could have a unique mix of national quintiles within the province. In fact, in most cases the disparity is mainly the result of differing average allocations, and not different poverty profiles. The argument for a national resource targeting list approach would be that it is just for the national government to ensure that equally poor learners were funded equally. The problem of glaring disparities along provincial boundaries would clearly be resolved by the national approach, but most of this problem could currently also be dealt with if all provinces maintained similar average school allocations. This is at current levels of funding. However, as absolute funding increases, and we expect it will, the effect of applying a distribution model separately in each of the nine provinces, as is currently the case, will become increasingly problematic from an equity point of view.

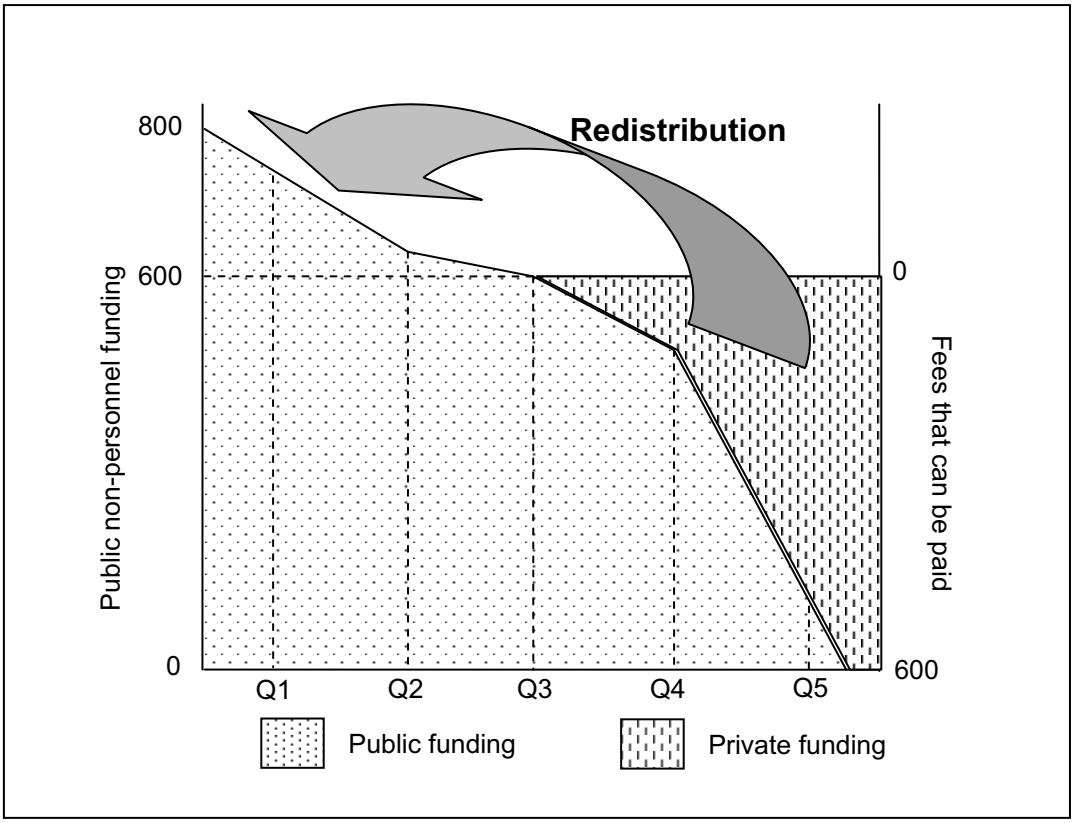
10.1.6 Fees and poverty as determinants of the distribution curve

The progressivity curve

The current 35-25-20-15-5 benchmark distribution curve in the Norms and Standards was arrived at after wide consultation and some investigation into education expenditure trends in other developing countries. The Norms and Standards recommends the use of the benchmark curve, and is strong in insisting that the overall progressivity should be maintained no matter what amendments PEDs bring to bear on it. Given the existence of some leeway, and given the importance of understanding the logic behind the distribution curve anyway, this section outlines how fees and poverty can be considered as logical determinants of the distribution curve.

The following graph illustrates the basic dynamics, though the scenario is one of many possible scenarios. *The amounts used in the scenario do not reflect current funding levels, or any proposal.*

Figure 15: Fees, poverty and school funding



Redress to poor learners

For the model to make sense, it is necessary to have a benchmark per learner allocation that can be regarded as adequate for a non-poor learner, i.e. a learner who does not require any poverty alleviation top-up. In the above graph, the benchmark is set at R600. Learners at the non-poor end of the continuum, in quintile 5, for instance, have parents who can afford to contribute private resources to the school. This makes it possible for the state to fund non-poor learners at a level below the R600 level. This is important for redistribution of state funding, as funds not spent on the rich, can be spent on the poor. Learners at the poor end of the continuum, in quintile 1, for instance, have parents who cannot be expected to contribute resources in the form of school fees. It is therefores necessary for the state to fund these learners adequately, at the R600 level. However, because poverty is a disadvantage that makes education more difficult, and because our objective is equality of outputs, not inputs, it is necessary for the state to top up the R600 allocation for each poor learner with an additional amount. This additional amount, R200 in the graph, represents a recognition of the fact that it is more costly to educate poor learners than non-poor learners.

The slope of the curve, whether it is represented by 35-25-20-15-5 or by some other scale, is therefore informed by poverty, the need for poverty top-ups in the system, and, at the non-poor end of the distribution, the ability to contribute school fees. These factors, plus the determination of the adequate amount of funding, will decide whether the total 'savings'

owing to private contributions will equal the total top-up required by the poor. It is not necessary for the two to be equal for the system to work.

Unnecessary for poor to pay fees

This is the basic logic of the Norms and Standards distribution curve. It may strike some as strange that, given this logic, poor schools are charging school fees. This is indeed strange, at least insofar as it was not a SASA or Norms and Standards intention that parents of poor learners should have to pay for basic education input – on the contrary, there is the intent that it should be totally unnecessary for poorer schools to charge fees. As is explained in section **0**, however, particular budgeting processes have left PEDs with inadequate capacity to implement the Norms and Standards adequately, and this is one of the key concerns of this Report.

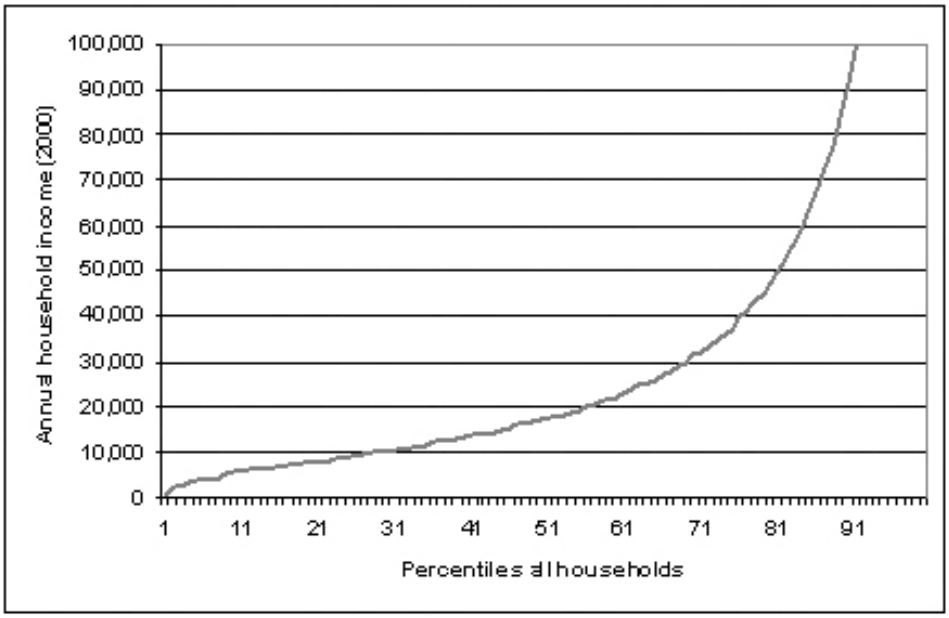
Can the poor be expected to pay school fees?

Two key questions flow from the previous graph. The first question is: Who is able to contribute school fees, and what level of fees can be expected? The extreme income inequalities in the country make incomes in quintile 5 exceptionally high (see the next graph), so we can assume that this quintile can cover all or most of the basic non-personnel costs. Considering that around 40% of the country can be considered poor in absolute terms, we can also assume that we cannot expect quintiles 1 and 2 learners to come up with school fees. This leaves us with the question of what fee contributions can be expected from quintiles 3 and 4. This is a key question that has not been adequately answered yet.

Who are the poor?

The second question is: Who is poor, and how large a top-up is required to give poor learners a fair start in their educational lives? 40% of the population is generally considered to be poor, but this is not a homogenous group. As the following graph shows, the income of quintile 2 is almost double that of quintile 1. There seems to be an argument for differentiating the top-up amongst the poor However, there has been a great deal of debating about whether the current 35-25-20 setup, which implies that quintile 1 would get a top-up three times as high as that for quintile 2, is optimal,. A key question is what the top-up for the poor should be spent on in order to equalise educational opportunity. Clearly, there is no one-fits-all answer to this question, although it is useful to have some guiding parameters. Some PEDs prefer an approach where at least some of the top-up is not granted directly to the school, but is rather used for items like management training.

Figure 16: Average income of households (2000)[15]



Funding to remain pro-poor

Key questions regarding the distribution curve have been raised, and a model for understanding this curve has been sketched. There is no simple relationship between an optimal distribution curve and, say, household income. Moreover, the fact that implementation of the Norms and Standards has begun, with most PEDs adopting the 35-25-20-15-5 benchmark, means that vested interests in the status quo exist. Amending the distribution curve for improved targeting of poor learners should always be an option, but the conceptual and practical difficulties inherent in doing this need to be borne in mind.

10.1.7 A national resource targeting list approach

Modelling a possible national resource targeting list approach involves using data on the relative poverty profiles of provinces, as described in section 0 above, to determine distribution of funds between provinces. It also involves examining how various input variables translate into global cost, and assessing the impact of the transition from a previous system to a new system on individual provinces and schools.

Treating the poor the same nationally

This section will outline the basics of a possible model. Importantly, the school allocations used in the scenarios are still hypothetical. It is not the aim of this section to determine what an affordable and adequate average school allocation should be. To arrive at this, more extensive analysis and budget reprioritisation would be required. The model implies the following process:

[15] Source is the 2000 Income and Expenditure Survey of StatsSA. The average income of the top percentile of households, not shown on the graph, is R630,000.

- Á All schools in the country would be placed on a national resource targeting list, i.e. the poverty of any school in the country would be assigned an index of poverty that would be comparable to the poverty of any other school, even a school in a different province.

- Á An adequate per-learner allocation would be set nationally The distribution curve in the Norms and Standards, possibly amended to more optimally target poor learners, would be used to determine the per-learner and per-school allocations.

- Á The total cost of all school allocations for each province would be worked into the equitable shares formula, to bring about the redistributive impact of the national approach. Alternatively, the total cost would be top-sliced off the provincial vertical cut and converted into a conditional grant that would go to provinces to cover the cost of the school allocations.

- Á A monitoring system would check that allocations went towards the intended recipient schools.

Who is counted in the national poverty list

What is possible is an approach like the one described above where only certain learners are targeted from the national level. Models were run where only GET learners were targeted, and only learners in the poorer quintiles. The implication of such targeting by the national approach is that the PED would determine, independently of the national process, the allocations for non-targeted learners. Three scenarios are presented on the following page. In scenario 1 (to take an example):

- Á The target group is all Grade 1 to 9 learners who would be in national quintile 1 (2001 enrolment figures were used).

- Á 'Target as % of all POS learners' is the targeted learners divided by all POS learners in the province. This figure increases the greater the proportion of learners in Grades 1 to 9, and the greater the proportion of learners in national quintile 1, in other words the poorer the province.

- Á 'Current avg. allocation for target' is the average allocation actually granted by the province in 2002 per learner about to be targeted according to the new national approach. This will depend on the spread of the national quintile 1 learners across the provincial quintiles. If national quintile 1 is spread across provincial quintiles 1 and 2, then the figure appearing will reflect the average between the 2002 allocations for provincial quintiles 1 and 2.

- Á 'Total current allocation' is what the PED would have spent on the allocations for the *targeted* learners in 2002.

- Á 'Average desired per-learner allocation' is R700, which is 35 / 20 í 400. R400 is the level of funding determined for quintile 3, which we can also regard as the basically adequate level, i.e. before any poverty alleviation top-up has been applied. The 35 / 20 ratio implies that the recommended benchmark curve in the Norms and Standards is applied.

Inter-provincial equity for poor

Á ‘Total allocation needed’ is the total cost of the new allocations for the targeted learners. The difference between the national figure here and the national total current allocation figure is the net national cost of the programme. However, one would need to be careful here. We cannot say that the net cost per province is the difference between the two provincial figures. It would not be just or logical simply to grant each province the difference between the current expenditure level and the new total. This would punish provinces like KwaZulu-Natal or the Free State, which had been spending high amounts on the targeted learners, and would unjustly reward provinces with a poor expenditure record, like North West. It would be necessary to grant all provinces the full amount needed for the targeted learners. KwaZulu-Natal would then not be punished, and would apparently experience a gain as the previous R95m budget became displaced by the national grant, making the R95m available for other budgets. North West would of course experience a smaller apparent gain. The net effect on each province would depend to a large degree on how the top-slicing would occur to obtain funds for the conditional grant (if the conditional grant route were pursued). The financing issues receive more attention in the next section.

	EC	*FS*	*GP*	*KN*	*LP*	*MP*	*NC*	*NW*	*WC*	*SA*
Scenario 1										
Variables set:	Grades covered: **Grades 1 to 9** National poverty quintiles covered: **Quintile 1** Redress distribution curve used: **35-25-20-15-5** Desired average per-learner allocation (applicable to national quintile 3): **R400**									
Size of target group	501,163	97,866	153,440	503,246	274,520	124,369	17,827	131,150	44,768	1,848,348
Target as % of all POS learners	25%	14%	11%	19%	16%	14%	9%	15%	5%	16%
Current avg. allocation for target	0	220	363	189	155	52	426	77	194	134
Total current allocation (R ,000)	0	21,559	55,770	95,184	42,456	6,415	7,586	10,101	8,665	247,738
Average desired per learner allocation	700	700	700	700	700	700	700	700	700	700
Total allocation needed (R ,000)	**350,814**	**68,506**	**107,408**	**352,272**	**192,164**	**87,058**	**12,479**	**91,805**	**31,337**	**1,293,844**
Scenario 2										
Variables set:	Grades covered: **Grades 1 to 9** National poverty quintiles covered: **Quintiles 1 & 2** Redress distribution curve used: **35-25-20-15-5** Desired average per-learner allocation (applicable to national quintile 3): **R400**									
Size of target group	923,990	228,994	282,390	998,326	621,058	275,053	48,509	258,374	95,576	3,732,270
Target as % of all POS learners	46%	34%	20%	39%	37%	31%	26%	29%	11%	33%
Current avg. allocation for target	0	186	344	169	138	45	406	66	194	124
otal current allocation (R ,000)	0	42,570	97,245	168,221	85,714	12,260	19,678	17,119	18,500	461,306
Average desired per learner allocation	600	600	600	600	600	600	600	600	600	600
Total allocation needed (R ,000)	**554,394**	**137,396**	**169,434**	**598,996**	**372,635**	**165,032**	**29,105**	**155,025**	**57,345**	**2,239,362**
Scenario 3										
Variables set:	Grades covered: **Grades 1 to 12** National poverty quintiles covered: **All quintiles** Redress distribution curve used: **35-25-20-15-5** Desired average per-learner allocation (applicable to national quintile 3): **R400**									
Size of target group	2,003,047	681,953	1,421,803	2,582,392	1,696,807	887,174	189,178	880,813	876,450	11,219,617
Target as % of all POS learners	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Current avg. allocation for target	0	126	208	122	71	28	303	43	146	95
Total current allocation (R ,000)	0	86,179	295,249	315,284	120,244	25,263	57,279	37,833	127,900	1,065,232
Average desired per learner allocation	400	400	400	400	400	400	400	400	400	400
Total allocation needed (R ,000)	**801,219**	**272,781**	**568,721**	**1,032,957**	**678,723**	**354,870**	**75,671**	**352,325**	**350,580**	**4,487,847**

The following table examines some of the effects of implementing the national approach in an imaginary province. All learners in national quintiles 1, 2 and 3 are targeted, and the quintile 3 average allocation is set at R250. It is assumed that schools will strongly tend to allow the increased allocations to displace school fees. It is furthermore assumed that funding of quintiles 1 and 2 will continue as before, and will be completely under the control of the PED.

Table 2: Possible per quintile impact (for the funding of each learner)

Possible per quintile impact (for the funding of each learner)					
Assumptions:	Average (i.e. quintile 3) allocation of R250 enforced for target learners Quintiles 1-3 covered High propensity for allocation to displace fees				
	NQ1	*NQ2*	*NQ3*	*NQ4*	*NQ5*
Pre-change scenario					
Public funding	290	207	166	124	41
Progressivity	*35*	*25*	*20*	*15*	*5*
Private inputs	58	77	113	245	1,167
School fee	46	59	84	180	926
Other private	11	18	29	64	241
TOTAL INPUTS	348	284	278	369	1,208
Post-change scenario					
Public funding	438	313	250	124	41
Progressivity	*38*	*27*	*21*	*11*	*4*
Private inputs	0	0	28	245	1,167
Household relief	*58*	*77*	*85*	*0*	*0*
School fee	0	0	0	180	926
Other private	0	0	28	64	241
TOTAL INPUTS	438	313	278	369	1,208
Growth: state funding	51%	51%	51%	0%	0%
Growth: overall resourcing	26%	10%	0%	0%	0%

A few things stand out:

- The targeting of poor learners has changed the progressivity of allocations, or the distribution curve, from 35-25-20-15-5 to 38-27-21-11-4. The system is therefore more progressive than it was before. This is a likely effect of a national approach that targets only poorer quintiles, although it is not necessarily an undesirable effect.

- Assuming that increases in the state allocation displaced fees as far as the increase in the allocation would allow, total public plus private funding of each learner would not go up as sharply as the state allocation. For instance, in quintile 1 the state allocation per learner goes up by 51%, from R290 to R438. However, because the space created by the increased allocation was used to abolish the school fees, and to end the requirement that parents supply certain inputs, such as stationery, in kind, the net increase in per-learner resourcing is only 26%. Again, this should be noted, although it is probably the effect we would want to see.

Increase in state allocation makes fees unnecessary

- In quintile 3 the overall growth in resourcing is 0%, because the increase in the allocation is less than the historical per-learner input by parents. We can probably regard this as an unlikely outcome, as parents and the school would probably not fully displace private inputs with the state allocation, especially given that the ability to pay fees in quintile 3 is higher than in the lowest two quintiles, and given that parents would want to see the net resourcing per learner increase.

- What is not illustrated in the above table is the case where the national per-learner allocation is lower than the historical allocation of the province. In such a case, the PED may top up the national allocation, so that the historical funding level would be maintained. This would undermine the equity criteria somewhat, though not the adequacy criteria, if the national quintile 3 funding level were set at an adequate level. The top-up would be in line with the provincial prerogative to distribute provincial resources according to its own assessment of what is optimal, and would not be common, given that historical expenditure levels are generally well below a level we can consider to be adequate.

The approach described in this section comes with certain problems. For instance, expenditure patterns within schools that had a mix of targeted and non-targeted learners (e.g. secondary schools if only Grades 1 to 9 were targeted) could be a concern. However, the benefits of the approach are, in particular:

Quintile 1 is the same throughout the country

- There would be a very explicit and simple-to-understand system that would make it clear what each poor learner was receiving. If you were a quintile 1 learner anywhere in the country, you would receive an adequate amount (with some poverty alleviation) of X rand. This would resolve a lot of confusion and conflict currently caused by difficulties in understanding how the system works.

- Provinces with greater levels of poverty would receive additional funding, brought about through greater weighting of poorer provinces in the national division of revenue process.

10.1.8 Funding the national approach

How will a single targeting list be funded?

There are essentially two options, which can be mixed, for funding the national resource targeting list approach described in the previous section. One option is to top-slice current provincial allocations in the division of revenue process, in order to finance the national approach. This option is essentially a matter of reprioritising budgets towards the school allocations, and away from other education (or even non-education) expenditure items. The second option is to make use of expected increases to the baseline in the provincial block grant. This option also involves reprioritisation, as expected increases in real terms have already been incorporated into MTEF budgets. However, this kind of reprioritisation would presumably be less painful insofar as it does not imply the shrinkage in real terms of any existing expenditure.

The second option is clearly the more feasible one. Expected real increases to the baseline are considerable. Conservatively, it is estimated that real expenditure on education in the provinces will rise by 1% per annum over the current MTEF period. Considering that enrolments are not expected to rise significantly, this translates into some 'additional' R0.5bn each year. If this full amount were directed towards the targeting of quintiles 1 and 2 GET learners, and if we consider the costs identified in the previous section, it would be possible to phase in an allocation of R700 for quintile 1 and R500 for quintile 2 over about three years. The phasing could occur through the progressive raising of the allocation, as well as through the incorporation of first quintile 1, then quintile 2 learners.

Budgetary space exists

Budgetary space for improvements to the school allocations clearly does exist. The size of this space depends on a wide variety of factors, including the budgeting process factors discussed in section **0**. The parameters just mentioned are conservative, and widening those parameters is quite possible. However, trade-offs must be carefully considered, be they within education, or between social sectors.

10.1.9 Measures of poverty

Simplify measure of poverty

The current provincial approaches to pro-poor school funding, and the proposed national approach, require reliable measures of the poverty level of each school. The Norms and Standards requirement is that two factors should be given equal weighting in the determination of school poverty: (1) the physical condition, facilities and crowding of the school, and (2) the relative poverty of the community around the school. A 2002 DoE study shows that the second of these two factors used on its own would provide a simpler and more reliable measure of school poverty. The option of simplifying the current approach should perhaps be considered, in particular if the decision is taken to produce a standardised national resource targeting list.

Use of data

The use of StatsSA income data to assist the recalibration of current provincial resource targeting lists is a possibility. What should be noted, however, is StatsSA's own observation that the relative poverty of provinces is changing quite rapidly. The most extreme case is that of Limpopo, which slipped from sixth poorest province in the country in 1995, to the poorest province in 2000. However, even other provinces have experienced significant changes in their levels of poverty relative to each other. Note that we refer here only to how provinces compare with each other and not to how they compare with the aggregate levels of poverty in the country as a whole. What this should warn us against is any static approach within a pro-poor funding model.

10.1.10 Poor learners in non-poor schools

State funding to less poor schools

An issue that has received some attention is poor learners enrolled in quintile 5, in other words relatively rich, schools. Some of these learners live in the vicinity of the school, and are poor learners living in a rich area, e.g. in the case of the children of domestic workers, or poor learners from a nearby informal settlement that has no school. Some of the learners do not live in the vicinity of the school, and they commute from another area that does have a school which the parents regard as

inferior in terms of quality. The issue is important here, insofar as it has been argued that it is unjust to fund poor learners in rich schools as if they were rich learners. All learners in quintile 5 schools receive 25% of the provincial average per-learner allocation. It has been argued that the funding level for individual learners who are poor should be above 25%.

Should funds follow learners

For a variety of reasons, it would be unjust to increase the funding for poor learners who commute to rich schools. Increasing the funding would in effect be moving funds from poorer to richer schools on the basis of a choice made by a relatively small number of parents. This is arguably unfair towards those poor learners who do not commute to the rich school, and instead attend school in the poor township or rural area. Moreover, parents who enrol their children in rich schools some distance away tend not to be the poorest parents in the community – they are able to afford the cost of transport. Allowing the school allocation to follow the learner from one area to another would undermine community-based schooling, particularly community-based-schooling in poorer areas. Already high levels of commuting, which has its own problems in terms of the safety and time of learners, would increase further, and the task of building up quality schooling in historically disadvantaged areas would be further complicated.

The matter regarding the poor learner who lives near the rich school is more open to debate. Two suggestions have been made:

Less poor schools should not be capped

- Given the capacity of the rich to contribute privately to public schooling, learners in quintile 5 from high-income households should be receiving a zero allocation from the state, meaning that the 25% that the state does contribute to these schools should be used for adequate funding of poor learners, to a limit of 25% of learners in the school. It should be possible to debit retroactively the allocations to rich schools where enrolment of poor learners is less than 25%.

- We should identify what quintile poor learners in rich schools correspond to, according to some criteria that would have to be developed. These learners should then be funded differentially to the other learners in the school, as if they belonged to another quintile.

Poor learners in less poor schools to be exempt

Both of the suggestions, but in particular the second one, are administratively complex and costly. There are also equity considerations that we would have to take into account. By law, poor learners living near a quintile 5 school cannot be excluded from the school, and they would qualify for school fee exemptions. Why would we then fund poor learners in these schools preferentially? It would either be to protect the revenue of the quintile 5 school, or to avoid the risk of the social marginalisation of the poor learners resulting from the exemptions process. The first reason is not valid from an equity point of view. Exemptions are a way of bringing about more pro-poor redress in the schooling system. The second reason may seem valid, but it is applicable to all learners who qualify for exemptions, regardless of the quintile of their school. In other words, if we funded poor learners in quintile 5 schools preferentially, we would also have to fund preferentially learners in quintile 3 schools who were poorer than the community average, and qualified for fee exemptions.

10.1.11 Recommendations

The discussion and analysis with regard to school allocations take us to two main recommendations, each with sub-recommendations.

Completion of specific education resourcing studies

The Department of Education should:

- Complete the determination of a costed minimum package of non-personnel inputs required for a poor school to perform well. This information should be available for integration into the national, provincial and local planning processes by the end of 2003. The DoE should begin focussing on the GET band in this regard, but should move towards similar improvements in the FET band.
- Conduct further research into the optimality of the current 35-25-20-15-5 distribution curve of the Norms and Standards, given the changing ability of households to contribute school fees. The DoE should also look into how top-ups above the average level of funding in poor schools can best be utilised to provide all learners with an equal educational start in life. This research is of an ongoing nature, but key research outputs should be available by the end of 2003.
- Complete a comprehensive and empirically informed study of the education production functions applicable to South African schools, with their respective advantages and disadvantages in terms of efficiency. This task should be completed by mid-2004, and should be informed by local and foreign research in this area.

A national resource targeting list approach to ensure adequate non-personnel recurrent funding in all poor schools

The Department of Education should:

- Clarify sections of the current policy determining what school inputs are covered by the Norms and Standards school allocations. It should also be made clearer how publicly funded inputs not covered by the school allocations should be provisioned to schools. The policy clarifications should occur in 2003.
- Assist PEDs in determining the extent of inadequate public funding, especially in poor schools, through the availability of better information on a basic minimum package of inputs. This should begin in 2003.
- Lead an investigation into options for a more inter-provincially equitable and transparent approach to the school allocations

determined by the Norms and Standards. This investigation should involve intensive negotiations with PEDs, the National Treasury, and other key stakeholders. The aim should be, as a minimum, to reduce the glaring inter-provincial disparities in the funding of equally poor learners, and to ensure that all poor GET learners in the country receive a school allocation that can cover a basic minimum package of non-personnel recurrent inputs such as textbooks, stationery, minor building repairs, additions to the school's media collection, copying facilities and electricity. Budget reprioritisation and space provided by increases to the baseline in transfers to provinces should be viewed as options for financing the new approach. Agreement on an approach should be reached by the end of 2003.

- Consider changes to the way in which school poverty is currently measured, if this improves efficiency and the accurate targeting of poor learners.
- Ensure that poor learners who attend non-poor schools, and hence receive less in terms of the school allocation, are properly catered for in the funding policy.

10.2 School fees and other private inputs demanded by schools

This section deals not only with school fees, but also with the matter of non-fee inputs demanded by schools.

10.2.1 SASA and the Norms and Standards on school fees

School fees

SASA makes it an obligation for the SGB to supplement the state funding of the school through reasonable means. These means include, but are not limited to, the charging of school fees. Any fees charged must be agreed to by a majority of parents at a duly constituted general meeting of parents. Fees received must be paid into the school fund, as must any other private income or state grants. This means that all expenditure is from one account, and it is not possible to specify exactly what school fees are spent on, if there is also non-fee income. All expenditure from the school fund must be for educational purposes. Parents are legally bound to pay their school fees in full, unless they have been exempted.

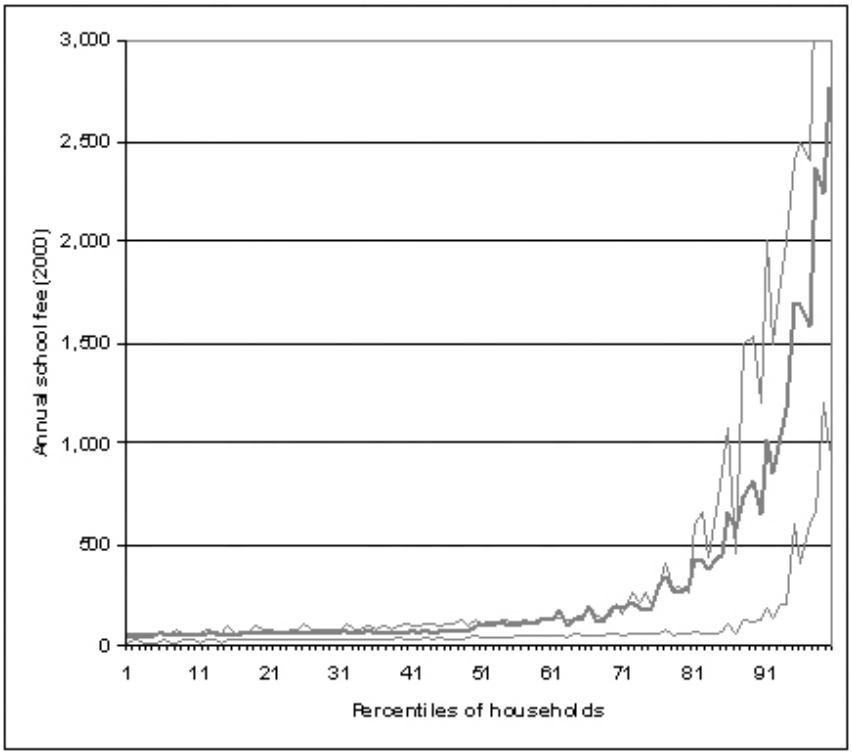
Exemptions

The National Norms and Standards for School Funding and the Exemption of Parents from the Payment of School Fees Regulations (Notice 1293 of 1998) lay down the exemptions process. A parent from a household with an income that is less than thirty times the per-learner school fees, is eligible for partial exemption, and if the income is less than ten times the fees, the parent is eligible for full exemption. It is the responsibility of the parent who satisfies the conditions for an exemption, to make a formal application to be exempted. The SGB manages the assessment process, which includes the scrutiny of payslips and other documents relating to income. If a parent is unhappy with the SGB's assessment of eligibility, there is a right to appeal to the Head of the PED against the SGB's decision.

10.2.2 Level of fees paid by parents

The following three graphs illustrate the level of school fees paid by parents in 2000, according to StatsSA's Income and Expenditure Survey.

Figure 17: Average per-learner fees according to income (2000)[16]



What is striking about the first graph is how much more parents pay in school fees in quintile 5 than in any other quintile. The thick line indicates that the mean annual school fees paid per learner in quintile 5 is between R300 and R2,700. In the other quintiles, fees paid are much lower. In quintiles 1 and 2 and nearly all of 3 they never exceed R100. The mean fees per learner indicated in the graph obviously blur the fact that fees in secondary schools tend to be higher than fees in primary schools.

Some parents in less poor schools are willing to pay large school fees

The two thinner lines indicate the upper and lower bounds of the middle 50% of fee payers. In other words, the 25% of households which pay the highest fees would lie above the top thin line, and the 25% of households

[16] Data source is StatsSA's 2000 Income and Expenditure Survey (IES). Households are divided into one hundred groups, or percentiles, according to total income. The thick line represents the average per learner school fee. (Certain assumptions had to be made on the basis of age of household members as to who was a likely learner.) The two thin lines enclose the middle 50% of each percentile of households, in terms of level of school fees paid. The distance between these two lines thus indicates what the variation is. Where the thick line is close to the top thin line, this indicates the presence of many high values in the top 25% of fee payers.

which pay the lowest fees would lie below the bottom thin line. The thin lines thus indicate how much variation there is in fees paid. It can be seen that there is a lot of variation, particularly in quintiles 4 and 5. Although many households pay very high fees, there is a substantial number of households in quintiles 4 and 5 who pay less than R100 per year in fees. This tells us that household income is not the only determinant of what level of fees is paid. There are other strong determinants, one of which would be the parents' choice. In quintile 5 in particular, parents, owing to their high capacity to pay fees, are faced with the option of paying more than a basic amount in fees in order to reduce the L:E ratio, through the private employment of educators. A second important factor behind the high school fees in some quintile 5 schools is the choice to continue using capital infrastructure and equipment left from the apartheid years, such as swimming pools, sports pavilions, pianos, etc., which carry high maintenance costs. It should be emphasised that this is largely a matter of choice. As the graph shows, many high income earners do in fact choose not to raise fees to pay for these things.

The 2001 Systemic Evaluation data indicates what schools actually charged in school fees. It also gives an indication of what is actually paid on average for each learner. The following table summarises the SE and the IES data.

Table 3: Fees charged and fees paid (2001)[17]

	Fees charged per learner (SE)	Fees paid per learner SE	IES
Q1	83	18	49
Q2	64	35	63
Q3	85	49	89
Q4	124	69	192
Q5	2,494	1,720	986

Levels of school fees

In terms of fees actually paid, the IES provides higher values than the SE for quintiles 1 to 4, and a lower value for quintile 5. We should expect lower values in the SE, as this survey covers only Grade 3 learners, and fees are higher in the secondary grades. The quintile 5 figure is therefore unexpected, although we should remember that there are a number of methodological inconsistencies in the process that produced these figures. However, the differences in the quintile 5 values are only really a problem when it comes to understanding the macroeconomic impact of fees – we would like to know how many billion rand is flowing from households to schools in the economy. The values in the table all confirm the pattern that fees in quintile 5 are a lot higher than in any other quintile.

[17] Values are adjusted for inflation so they represent 2001 rands. It should be remembered that quintiles for the IES data mean quintiles of households according to total household income, whilst quintiles for the SE data means quintiles of learners according to the fee per learner actually paid. This is one of the methodological hitches, but certainly not the only one.

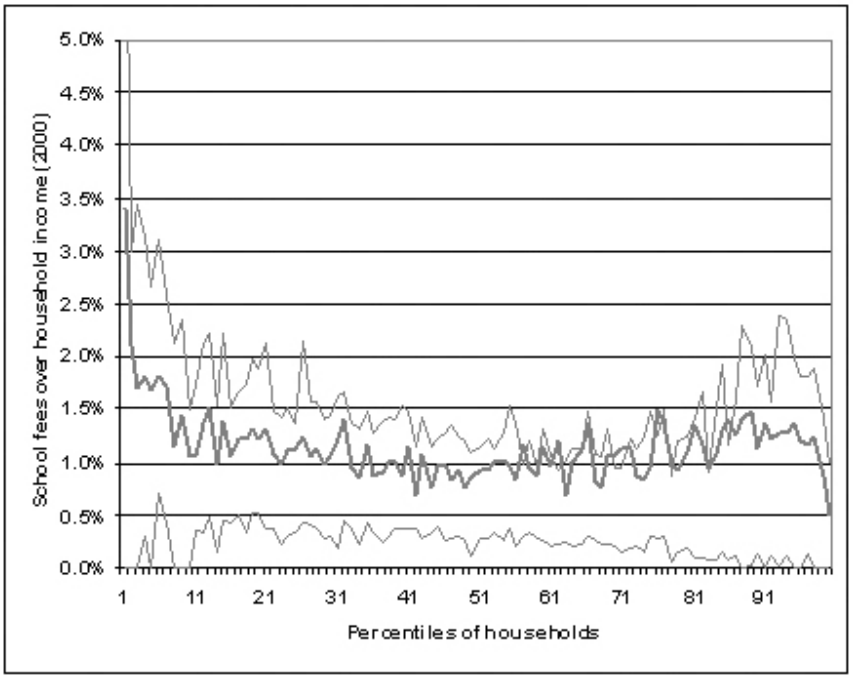
Private contribution to education

Overall, fees in 2002 contributed some R3.5 billionto R5 billion to schooling, depending on what data we use, and whether we factor in the 'hidden' fees referred to in a subsequent section. This means that some 8% to 11% of all expenditure on public schools was from private sources. However, private contributions are concentrated within quintile 5, where possibly as much as 35% of total expenditure on public schooling is from fees. In the three poorest quintiles, fees contribute between 0.5% and 2.5% to total expenditure. Importantly, we cannot, on the basis of these figures, make a comparison between 65% coverage by the state for quintile 5 and around 98% for the other quintiles. Total state expenditure in current terms (i.e. ignoring the capital investment side)on every quintile 5 learner is not very different to total state expenditure on every quintile 1 learner, though the implementation of the Norms and Standards and amended post provisioning norms is changing this in favour the poor. What should be remembered is that total public plus private expenditure on quintile 5 learners is some 50% higher than for other learners.

Cost of education

StatsSA data points to a dramatic increase in the cost of education for households between 1995 and 2000. Education expenditure as a percentage of total household expenditure rose from 2% to 4%, though this translates into a real expenditure increase of about 60%. No other household expenditure category experienced increases of this magnitude. The following graph indicates the differences between rich and poor in terms of percentage of household expenditure going towards education in 2000.

Average school fees over household income (2000)[18]



[18] For this graph, total fees (not per learner fees) over household income was considered. Percentiles of households are arranged from poorest to least poor. Only households which were paying public school fees were considered in the final determination of the percentage. (As the percentage of schools charging fees is almost 100%, it is relatively

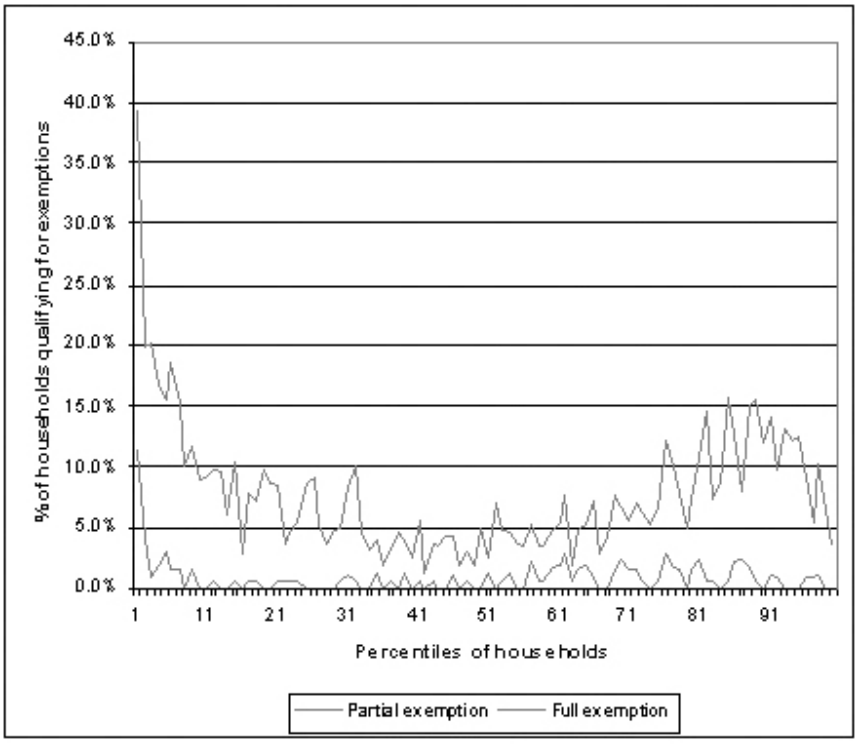
Level of school fees paid

Although the poorest fifth of all households pay low fees in absolute terms, of around R50 per year, this constitutes a high proportion of household income. The very poorest spend on average 2% of income on school fees, whilst the figure for middle income and high income groups is around 1%. There is thus an anti-poor bias in these terms. However, it should be remembered that even with recent increases in household expenditure on education, this expenditure item still constitutes a smaller portion of total household expenditure than, say, cigarettes and alcohol combined, which constitute on average 3% of household expenditure.

The next graph indicates that a substantial percentage of households ought to be qualifying for partial exemptions, which begin when the school fee exceeds one-thirtieth of household income. It is not possible to see from the data whether households are in fact being granted a partial exemption. The graph also indicates that very few households, under 1% amongst most of the poor, paid school fees in 2000 that were high enough for full exemptions to take effect. Thus non-compliance with the policy in terms of a full exemption is very limited. There is a rise in the bottom three percentiles, which reflects a problem for the very poorest 3% of households. The limited extent of this, however, makes it a relatively easy problem to solve. Overall, there are very few parents paying fees above the exemptions level.

safe to assume that the set of households paying public school fees is the set of households with children in public schools.)

Figure 18: Percentage of households qualifying for exemptions (2000)[19]



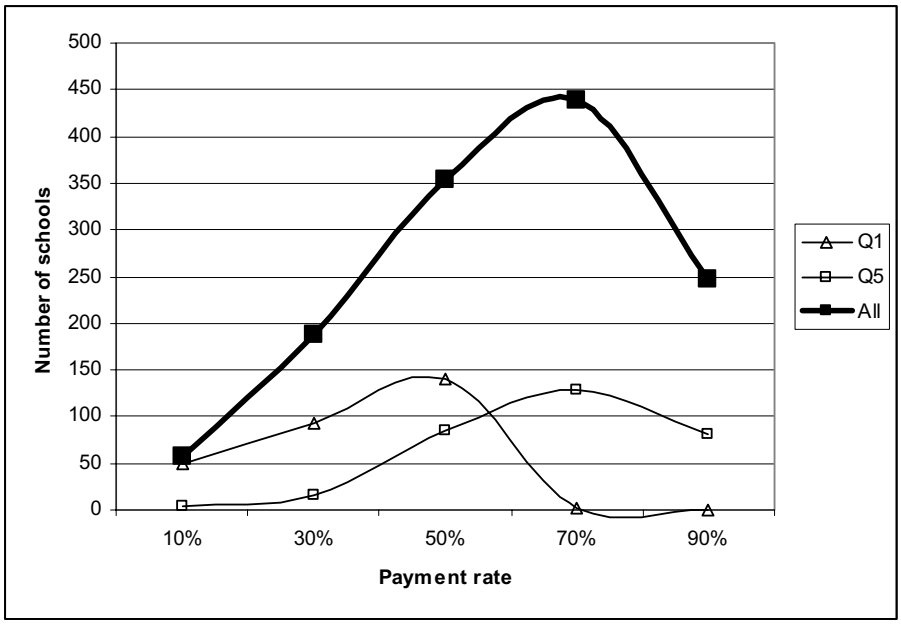
10.2.3 Household response to school fees

Parent response to school fees

The next two graphs use data from the 2001 Systemic Evaluation. They provide an interesting indication of how parents respond to school fees. According to school principals, overall only 58% of parents are 'paying school fees'. The question in the survey is ambiguous, so we have to regard the response with caution. Principals could be referring to the percentage of parents who pay the full school fee on time, who pay the full school fee sooner or later, or who pay at least some of the school fee at some point in time. The first graph unpacks the 58% average by quintile.

[19] The full exemptions line works as follows: The denominator is all households which pay some public school fees. The numerator is households that pay an average fee per school-age learner that is greater than or equal to one-tenth of total household income. The full exemptions line is therefore the proportion of households that should be receiving a full exemption in terms of the current policy. The partial exemptions curve indicates the same thing, but where fees in excess of one-thirtieth of income are paid. Percentiles of households are arranged from poorest to least poor.

Table 4: Fee payment rate in schools (2001)[20]

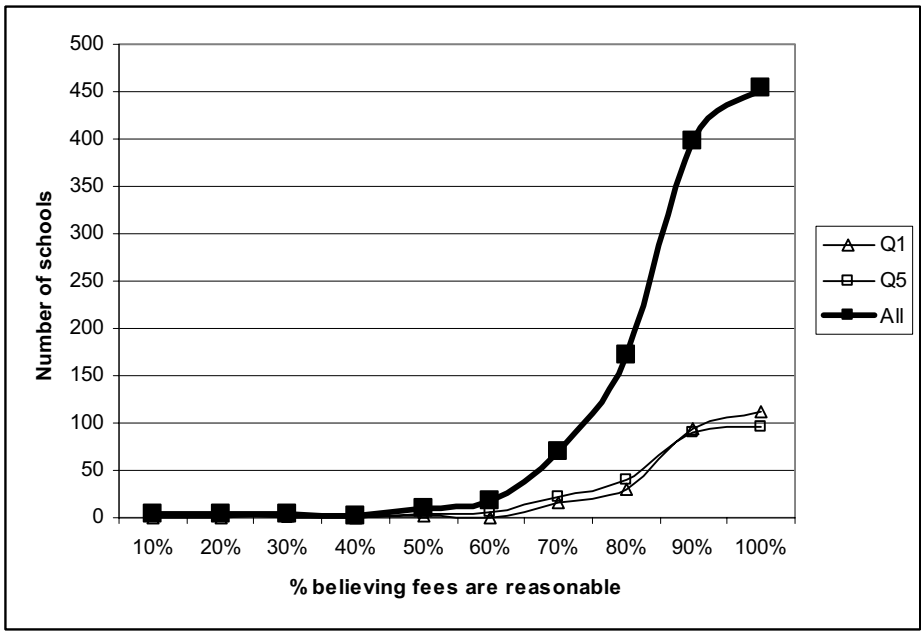


Payment rates

We can see that payment rates are better in quintile 5 than in quintile 1. It is likely that this is a result of the greater financial capacity of quintile 5 parents to pay fees, and as a result of the tighter controls and greater threat of legal action in quintile 5 schools. However, even in quintile 5, the payment rate is perhaps lower than one would expect, whichever way one interprets the survey question. Only 65% of parents overall are 'paying school fees' in quintile 5. In quintile 1, the situation is a lot more serious from the point of view of revenue collection. Practically no schools report that 70% or 90% of parents pay their school fees. At least half of all parents across all schools in quintile 1 do not pay their fees.

[20] The curves represent number of schools in the 2001 Systemic Evaluation falling into one of five bins representing the principal's response to the question 'What percentage of parents is paying school fees?'. The mid-point of each bin, e.g. 10% for the 0-20% bin, is used in the graph. Only two quintile curves are included, in order not to clutter the graph.

Figure 19: ***Parents who believe fees are reasonable (2001)***[21]



Reasonableness of school fees

The second graph illustrates the responses by over 40,000 parents of randomly selected learners to a question on whether they agreed that school fees were reasonable. Overall, 85% of parents said they agreed school fees were reasonable. Again, the question is ambiguous, as 'reasonable' could mean many different things. However, the response does provide a sense of the satisfaction of parents with the system. In this graph, there is almost no difference between quintiles 1 and 5.

One may find it strange that 85% of parents should find school fees reasonable, when only 58% of parents pay their school fees. However, it is quite possible to regard a system as fair and 'reasonable', whilst one does not comply fully with that system, either because one cannot afford to, or because it is easy to evade payment.

Media reports

The statistics are not inconsistent with a situation, often portrayed in the media, where there is widespread dissatisfaction with the system of school fees. Even if 'only' 15% of parents find the system of school fees unreasonable, this is a high enough figure to cause much tension in the schooling system, especially if one considers the strain that school fees places on households, and the risk that the children of non-paying parents will be marginalised. What the statistics do indicate, however, is that the problem is mainly one of a majority of parents in each school marginalising a minority.

Fee-setting

The dynamics are the fee-setting process are very complex. If fees are set too high, more learners qualify for exemptions, and the revenue of

[21] Systemic Evaluation data was used to obtain the percentage of parents per school who respond 'Agree' to the statement 'School fees are reasonable'. The denominator is all parents per school who provide a valid answer. The curves represent number of schools in each bin – 10% actually represents the bin 0-10%.

the school is adversely affected. There are therefore strong motives to avoid excessive school fees. On the other hand, some historically advantaged schools have deliberately raised fees with the intention of keeping poor learners out of the school. Strictly speaking, and in accordance with policy, high fees cannot exclude learners from particular schools. It is the admissions policy of the school, for which national and provincial equity-informed guidelines exist, that determine how new learners are prioritised. In practice, though, high fees do deter parents from attempting to enrol learners in particular schools.

Capping school fees?

From the available data, it would seem as if the fee-setting process is not the central problem – most parents seem to find fees reasonable – but that the exemptions process, which is what the minority would have to turn to in order to relieve their financial pressure, may well be the central problem. This would agree with the emphasis placed in a lot of the media's coverage of the school fees issue. Moreover, these statistics suggest that any attempt by Government to cap or remove school fees would receive limited support.

10.2.4 Hidden fees

Hidden fees

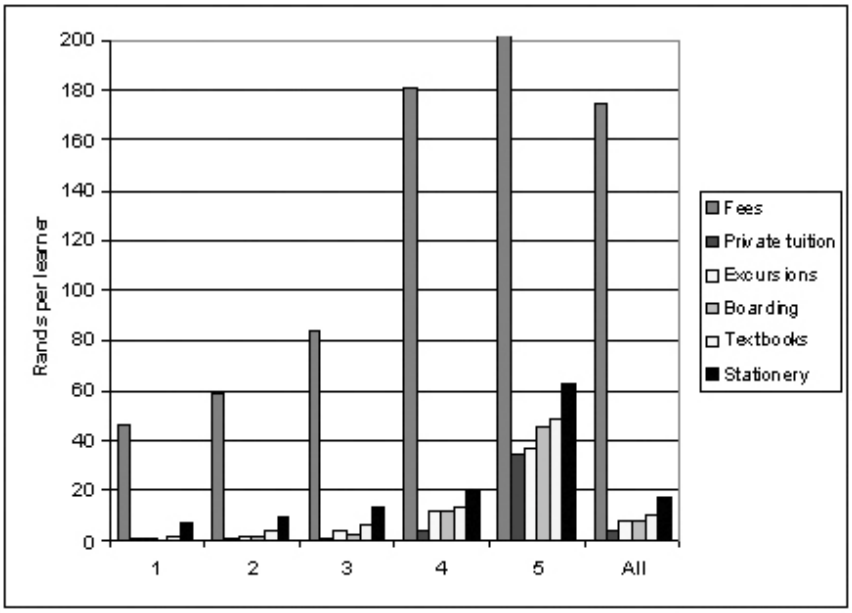
The term 'hidden fees' is used to refer to demands by schools for parents to make monetary or in kind contributions over and above the officially determined school fee. Schools sometimes demand that parents contribute additional fees to cover excursions or classes requiring expensive equipment, like computers. It is common for schools to demand that parents buy stationery and textbooks for use in the classroom, or raw materials like cardboard and paint needed for school projects.

Illegal

The legality of hidden fees is dubious. Monetary contributions over and above the school fee that are not channelled through the school fund, are clearly illegal. This is often the case. Moreover, SASA specifies that fees should be set at an AGM, so any fee-setting occurring outside this process would be illegal. The policy does not make explicit reference to demands by schools for in kind contributions.

StatsSA's 2000 Income and Expenditure Survey suggests that hidden fees amount to about 25% of the official fees, across all quintiles. The following graph provides the breakdown by quintile.

Figure 20: Private per learner annual expenditure by learner quintile (2000)[22]



School demands

Two important points need to be noted about these statistics. Firstly, because hidden fees generally constitute intermittent items that are demanded in a piecemeal fashion throughout the year, there would be a tendency for these inputs to under-stated. Respondents in the survey simply do not remember all the items, though they are fairly likely to remember what the official school fee is. Secondly, these statistics represent what households actually provide, not what the school demands. The school may in fact demand a lot more than what is provided – such a situation makes it likely that learners end up doing without certain items in the classroom.

Add-ons

There has been much media attention around what the 'hidden fees' for learners amount to. One report claimed, for instance, that a R100 official fee concealed a hidden fee of some R6,700. In that particular case, the cost of food, transport and the uniform was included in the R6,700 amount. The StatsSA data only allows us to gauge the cost of the items shown in the graph. This does limit the analysis, yet there is some validity in separating items like excursions and stationery from items like food, uniforms and transport. The former group of items is clearly educational, and there are strong arguments in favour of covering all these items through the school allocation, especially if the learners are poor. With the latter group of items, there is not the same clarity, and it could be argued that they are the responsibility of the household, or some other Government department, e.g. Health, Social Development, or Transport.

[22] Source is the IES 2000. The quintile 5 fee level of R926 is not fully represented in the graph.

Level of hidden fees

For the purposes of our analysis, understanding the magnitude of hidden fees is especially important for gauging what the additional per learner allocation should be if we want to begin to eliminate the need for both the official school fee and hidden fees in the case of poor learners. The StatsSA data used for the graph indicates that we are dealing with an official plus hidden fees level of R58, R77 and R103 for quintiles 1, 2 and 3 respectively. As has already been pointed out, this is clearly an under-estimate, and reflects only what parents pay, not what the school demands.

The cost of having 'hidden' fees in the system, as opposed to having all charges incorporated in the legally determined school fee, is that school accountability for resource utilisation is diluted. It should be remembered that 'hidden' fees generally do not appear in the budget or the financial statements of the school, making it easier for schools to conceal mismanagement of e.g. extra charges for school excursions.

Circumvention of exemptions

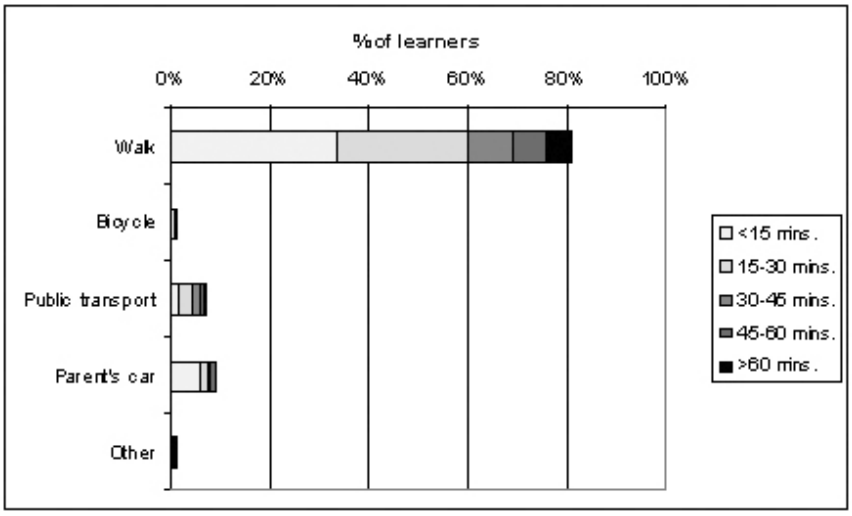
The effectiveness of the exemptions process is also affected. A demand that parents supply stationery in addition to the payment of fees, makes it more difficult to obtain an exemption as only the fee, and not the value of the stationery, would be taken into account in determining eligibility for fee exemptions.

Lastly, there is considerable dissatisfaction amongst parents over the unpredictability that is caused by hidden fees. Parents often have no way of anticipating when hidden fees will be charged, and what they will amount to. This undermines household budgeting and causes unnecessary pressure for the parents of the learner.

10.2.5 Transport issues

The 2001 Systemic Evaluation data shows that 81% of learners get to school on foot, that 7% of learners use public transport, and that 6% of learners spend more than an hour getting to school. The following graph illustrates this.

Figure 21: Learners by transport mode and time[23]



Access

Schools and PEDs feel strongly that learners who experience difficulties getting to school should be assisted. Most PEDs run some kind of scholar transport scheme involving school buses. There are accounts of schools financing their own transport schemes for learners. In Limpopo, learners have been provided with Government-sponsored bicycles. (With regard to bicycles, the low usage reflected in the above would be influenced by the young age of the Grade 3 learners covered by the Systemic Evaluation.)

Subsidies

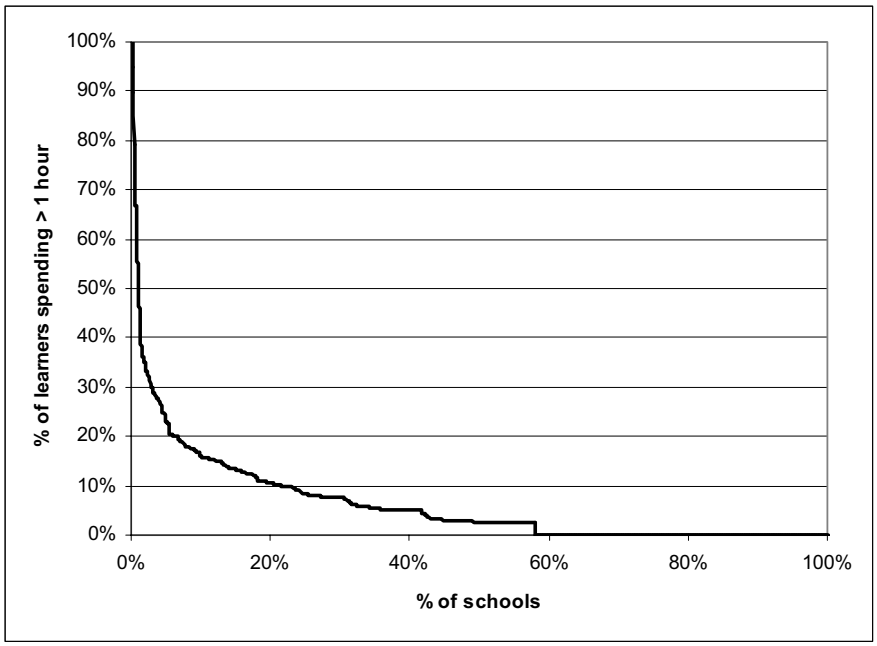
There are scholar transport assistance schemes that require some economies of scale, and others that do not. For instance, the economical roll-out of bus transport requires a critical concentration of target learners in a particular area. On the other hand, subsidies for public transport usage, or subsidised bicycles, are not dependent on a particular geographical concentration of target learners. It is important for the economic efficiency of the various options for different localities to be weighed up.

Walking long distances

As the following graph illustrates, there will inevitably be learners who need transport support, yet will be dispersed quite thinly across many schools. It is true that if we catered for the 20% most needy schools in terms of 'long distance' learners, we will have covered 90% of all the 'long distance' learners. However, it is inequitable to favour certain learners simply because the demand for the service is highly concentrated geographically. What this emphasises is the importance of exploring transport schemes other than the traditional school bus system. School buses play an important role, especially where they reduce the cost for the state due to the economy of scale. However, it is also important for there to be a default scheme that can be accessed even by needy learners in low demand areas.

[23] Source for this and the following graph is the 2001 Systemic Evaluation of Grade 3 learners.

Figure 22: Distribution of 'long distance' learners across schools



Alternatives

Subsidising of bicycles should perhaps be explored further. The state could actively engage in negotiations with relevant entities to reduce transport tariffs and discuss the implementation and logistics of subsidy schemes. The issuing of public transport vouchers to learners for use in minibus taxis is perhaps an option.

Difficulties

Despite the existence of these options, we should realise that transport assistance is widely recognised as one of the most difficult services to administer and finance in a public schooling system. School buses, even with economies of scale, are costly. If individual learners are targeted, it is costly to administer the eligibility test, and abuse of the assistance scheme is relatively easy. The assistance may also subsidise unjustly those households who live far from public services through choice. If it is more difficult for the state to offer transport assistance than to lower of uniform prices, provide school lunches and the eliminate both formal and hidden fees in poor schools through improved state allocations, then this should inform the prioritisation of our interventions. It should be remembered that relieving the financial burden of education in one area, automatically begins to relieve the burden in other areas too. In other words, if a poor household gets to spend less on uniforms, textbooks, stationery and food, then there is more money available to pay for other essentials.

10.2.6 Fee-setting policy and practice

Exercising parent rights

The fee-setting process may be less of a problem than the exemptions process. However, poor attendance at parent AGMs is a well-known fact, and this would clearly limit the effectiveness of the fee-setting practicesprocess. There are a number of options that would improve the say that parents have in the fee-setting process, although many of these options have practical drawbacks. Four options are outlined here.

- A minimum quorum for an AGM could be legislated. This option is virtually unimplementable, however, if we consider that it might become impossible for schools to hold successful AGMs, which would have disastrous implications for decision-making.

- The determination of school fees could occur through a ballot system which did not require parents to come physically to the school. This would be problematic, however, owing to illiteracy among many parents.

Some improvements

- An appeals system could be introduced whereby individual parents could appeal to the PED against the fee-setting decision of the school. If a sufficient number of such appeals were received by the PED, the school would be forced to rerun the fee-setting process. Here the risk is that PED officials would be drawn into time-consuming and charged school politics, and that this would impact negatively on the work and credibility of these officials.

- There could be stronger controls exercised by PEDs to ensure that schools complied with the policy in terms of inviting all parents to the AGM on time, and providing them with all the necessary information. This would be the easiest of the four options to pursue.

If parents felt more empowered to engage in the fee-setting debates, it is likely that more parents would attend AGMs. Government could empower parents through more information in the media about school financing issues.

Empowering parents to choose

In the case of quintile 5 schools, where there is enormous variation in fees charged, better information about other schools in the country, and in particular information on how fees relate to state resourcing and learner performance, would make it much easier for parents to gauge whether they were paying fees towards a better quality of education, or simply towards inefficient management and luxuries. The DoE could explore the feasibility of contracting a few private organisations, in addition to encouraging the media, to increase the dissemination of important information to parents at schools.

10.2.7 Exemptions policy and practice

Compliance issues

Section **0** above referred to some extremely worrying and illegal practices adopted against learners and parents who do not pay their school fees. Whilst the focus in that previous section was largely on the attitudes and culture that allow these things to happen, the focus in this section is more on compliance with the exemptions criteria and procedures laid down by SASA and the Norms and Standards. The two foci are obviously complementary. This section also focuses extensively on how collaboration between the education and social development departments can vastly improve the current fee exemptions setup.

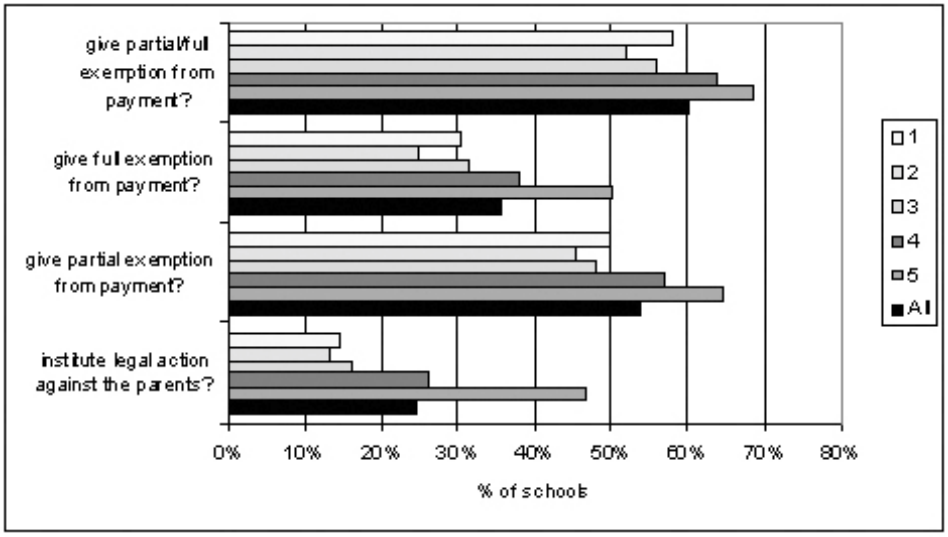
Legal action against parents

The next graph indicates what percentage of schools in the five quintiles follows the exemptions procedures and what percentage takes legal action against non-paying parents. The granting of exemptions in quintile 5 schools is slightly more common than in the other quintiles, but the differences between the quintiles in this regard are not great. In all quintiles, the majority of schools follow some kind of exemptions process. What is significant is that of the schools that do not follow any exemptions procedures, 76% have payment rates lower than 80%, i.e. have fewer than 80% of parents paying their school fees.

Illegal practices

What is also significant is that 15% of schools follow some exemptions process with regard to fees, whilst they simultaneously engage in the illegal practices described in section **0** above, like excluding learners from school, withholding reports from learners, etc. On the other hand, 17% of schools do not follow any exemptions processes, yet they do engage in these illegal activities. In other words, the presence of some kind of exemptions regime in the school is no guarantee that severe and illegal marginalisation does not take place, and, conversely, the absence of the exemptions regime is not an indicator of a 'clean' school in terms of marginalising the poor.

Figure 23: Exemptions and legal processes by quintile[24]



The exemptions process problem operates on three levels:

- There is a problem of compliance with the actual exemptions policy (or informal system as established by the school). For instance, school principals do not inform parents of the existence of an exemptions process, or educators at the school or friends of the school principal receive exemption from fees irregularly, through a process that is different to that applicable to most parents, or exemptions are not granted when they should be.

[24] Data source is the 2001 Systemic Evaluation. Respondents, who were principals, had to answer Yes or No to particular questions on what the school did if parents did not pay school fees. The bars indicate percentage of respondents with valid responses, who said Yes.

- There is a problem of compliance with other education policies flowing from the exemptions process. For instance, a principal does not exempt an eligible parent from payment of fees, and denies that parent's child access to the school.

- Even if all policies, either formal or informal, are adhered to, there can still be a problem of subtle marginalisation, in the comments that the school principal or educators make to exempted parents or their children, through intimidation of exempted parents in parent meetings, and so on.

Improving exemptions policy

Given the continued existence of school fees in public schools, even if it is only in some schools (see discussion in section **0** below), there will be a need for an exemptions process in the long term, so there is a strong motive for investing in the necessary policies and systems, and ensuring full compliance with the formal system in the long run and, at the very least, fair practice in the short run. One very fundamental problem with the current system is that it embodies a player and referee problem. The school principal and the SGB are obviously interested in raising as much private revenue as possible for the school, so it is difficult for them to be impartial referees in the determination of eligibility for exemptions. In particular, it is unlikely that the principal and SGB will give the exemptions applicant the benefit of the doubt when there is insufficient concrete evidence, or room for some discretion.

The Department of Social Development has three child grants that could be of relevance in determining what households should be exempt from paying fees.

- The child support grant reached 1.1 million children in 2001, and uptake has been increasing steadily. This grant is paid to poor households and is proportional to the number of children in the household aged 6 and younger.

- The care dependency grant reached 31,000 young people in 2001. This grant is paid to caregivers caring for disabled people aged 18 and younger.

- The foster child grant reached 93,000 foster children in 2001. It is paid to households in respect of each foster child in the care of the household.

Means test

All of the above grants involve a means test, and the care dependency grant also involves a test of disability. The Department of Education should assess whether the eligibility for a child support grant could automatically qualify a household for an exemption from the payment of school fees. Even if the ultimate recipient of the child support grant is not in school yet, it can be assumed that the need that qualified the household for the child support grant would make it unreasonable to demand school fees for any child in the household.

Lack of information

Much of the problem relating to exemptions has to do with lack of parent empowerment through information. Clearly, it is not sufficient to depend

on the school alone to disseminate information about people's rights in this regard. It has been suggested that a clearer, national and more user-friendly document than the current policy on exemptions should be put together and published periodically in the press. Moreover, the availability of an ombudsman and a toll-free helpline to assist parents would greatly empower parents.

10.2.8 School allocations as a determinant of school fees

Passing on savings to parents

In section 1.2.2, it was found that the level of fees per learner effectively paid rises with income quintile. Quintile 2 pays some 25% more than quintile 1, quintile 3 pays some 50% more than quintile 2, and so on. Given the timing of the surveys and the fact that implementation of the Norms and Standards began, and only partially so, in 2000, we can safely assume that the differences in fees paid would be more the result of income differences than differences in the pro-poor allocation granted by the state. However, especially as school allocations increase, we can expect school allocations to become a powerful potential determinant of school fees charged by schools. It should be remembered, though, that school fees, like prices in general, would be 'upwardly sticky'. There would be a great tendency for school principals and influential SGB members to raise total resources available to the school rather than allow a higher school allocation to bring about a lowering of the school fees. This underlines the importance of campaigns and availability of information that can empower parents in general to engage in the financial debates of the school. In particular, it would be important to make information about increases in the per-learner allocations very clear and public, so that parents would know what space existed for a possible lowering of the school fees. Basically, any agreement by parents not to let increases in the school allocation fully displace school fees on a rand for rand basis, should be justified and broadly supported in terms improvements in the quality of schooling.

10.2.9 The capping of school fees

The compulsory capping of school fees per learner by Government could involve determining a level, perhaps per quintile, beyond which schools could not set school fees. The level could be zero, effectively meaning a banning of school fees. Capping of school fees has received some support in the debates around fees. Whilst capping in certain contexts may be justified, there are good reasons to be very cautious about using this measure.

One important motivation for capping relates to the aim of cutting out excessive or luxurious expenditure in the school, above a level that we can regard as adequate. Currently, such capping would apply only in well-off schools, though if school allocations go up, it would be an option even in poor schools.

Capping has limitations

However, capping 'excessive' fees carries serious problems. The definition of adequacy and excessive expenditure is very slippery, and it would be problematic to apply some national standard in this regard. Secondly, it is debatable whether Government should withdraw the right of parents to choose existence and level of school fees, considering that this right is firmly entrenched in South African society.

School fees and accountability

Patronising the poor

Proposals have been made that instead of using adequacy as a yardstick, and saying school fees cannot be used to fund schooling beyond this level, we use some absolute poverty criteria as our yardstick, and simply ban fees in all poor schools. This approach is clearly coupled to the assumption that state resourcing in poor schools will be adequate. This raises the question of what the function is of school fees across all schools, including poor schools. Is it simply to raise revenue that the state does not provide? Schools and PEDs have argued strongly that school fees serve an important accountability function. When parents contribute to the resourcing of a school, even if it as low as 0.5% of total expenditure, parents are a lot more motivated to monitor management and efficiency in the school, and this is undoubtedly pressure that one would want in a school. Section 21 status, towards which all schools are ultimately moving, implies the mixing of public and, if fees are charged, private funds in a single school fund. This arrangement is especially conducive for parent involvement in the global resourcing issues of the school. Effectively banning fees in poor schools would remove this benefit. Moreover, an important signal would be sent out to poor communities, and society at large, that the poor were significantly less able than anyone else to make decisions about what to spend their money on. It is not inconceivable that the poor would choose to contribute private funds towards schools, even if state funding covered an adequate package of resources. Schools often play a range of roles in communities, and it is not always easy to differentiate the educational from the non-educational roles. For instance, the sporting activities of a school in a poor community may well lie beyond what would be considered the 'basic minimum package' of schooling, yet these activities could be sufficiently important in the poor community for parents to want to agree on affordable fees to finance this. Such arrangements have become deeply entrenched in many communities, and whilst they carry the risk of marginalising the minority who would prefer to opt out, they do play a community-building function. All these factors should be taken into account if we consider removing fees from poor schools.

Prohibit the pressure on the poor

If we did go ahead with the effective removal of fees from poor schools, then it would be preferable to couch the measure in terms of prohibiting fees in schools with adequate state funding, rather than in terms of prohibiting fees in poor schools. It may seem to be an unimportant matter of nuance, but the latter approach carries the signal, discussed earlier, that one would want to avoid. Moreover, it would be important to establish an appeals process, whereby a school with a convincing argument would have its right to charge fees restored by the MEC.

Section 0 above presented evidence that a vast majority of parents find fees reasonable. It is probable that the proportion of parents who regard as undesirable the *existence* of school fees, as distinct from the *level* of fees currently charged, is even higher. This should inform any discussion of possible Government control over fees in addition to the current controls.

10.2.10 Recommendations

The discussion and analysis around school fees and other private inputs takes us to two key recommendations.

More stringently monitored and better informed fee-setting processes

The Department of Education should:

- More actively, and on an ongoing basis, gather information on school fees and other private inputs at public schools so that increasing or declining pressures on households resulting from the public resourcing of schools can be properly gauged, and appropriate action taken. By 2004, the DoE should be in a position to provide better ongoing information in this regard.
- Tighten up policy, and its enforcement, so that the charging of 'hidden' fees over and above the legally determined school fees is eliminated. This should be done in conjunction with improvements to the state's resourcing of poor public schools. Demands by poor schools for parents to make in-kind contributions of stationery and textbooks should ultimately also be eliminated. In the meantime, a policy amendment should ensure that in-kind contributions and 'hidden' fees are taken into account when eligibility for fee exemptions is determined. The policy amendments and clarifications should occur during 2003.
- Explore ways of improving parent participation in the fee-setting process, e.g. through policy measures that would require more parents to take part. The supply of better information on fees should be viewed as one way of encouraging parent engagement with the fee-setting process. Parents should be in a better position to compare their school to other schools in terms of value for money. The DoE should ensure that fee information to support this decision-making process at the school becomes available during 2003.
- Consider strong action (including disciplinary action or prosecution, whichever is applicable) against principals, SGBs or individuals that deliberately do not comply with the procedures for fee exemptions and fee-setting, including instances where poor learners are excluded from schools on account of the inability to pay school fees.
- Pursue adequate resourcing of all poor schools as the best way of dealing with the problem of school fees in poor schools. The capping of school fees, whilst not impossible as an option, is not advised.

Fairer and more effective exemptions processes that are fully integrated into Government's poverty alleviation programmes

The Department of Education should:

- Collaborate with the Department of Social Development and other key role-players in order to revamp the current exemptions process substantially, and offer greater protection to poor households. A parent's eligibility for a fee exemption should be linked to the parent's eligibility for welfare grants, in particular the child support grant. The current 'player and referee' problem makes it important for the school principal's and the SGB's influence in the exemptions-granting process to be reduced. The DoE should produce detailed proposals for new exemptions processes by the end of 2003.
- Aim to reduce substantially the need for exemptions in poor schools, through the progressive raising of the school allocation and a reduction in the need for fees. School fees, if charged at all in poor schools, should be very low and should not be required to cover basic school inputs.

Transport assistance to poor learners

The Department of Education should:

- Together with PEDs and the Department of Transport, investigate the feasibility of a more comprehensive and equitable system of transport assistance to poor learners, over and above the current school bus schemes operated by PEDs. The outcomes of this investigation should be available in 2003.
- Given the difficulties inherent in transport assistance schemes, address the transport cost issue partly through the alleviation of financial pressures on households in other areas, e.g. school uniforms, food and LSMs.

11

Infrastructure development

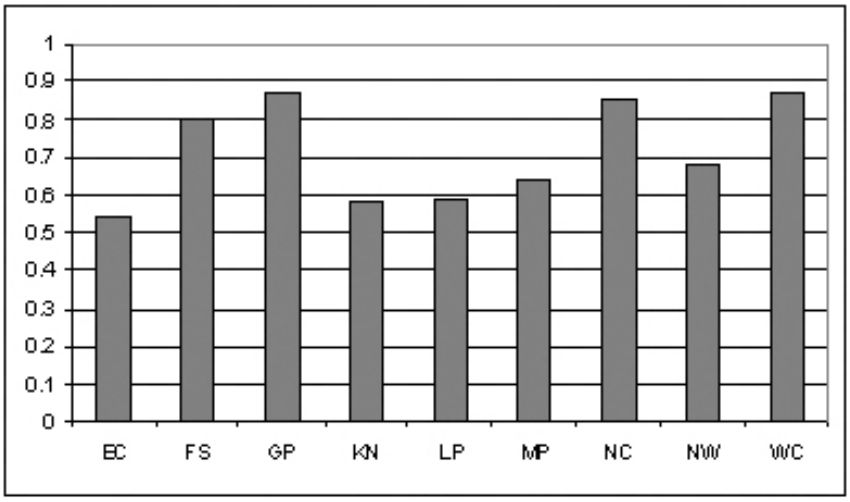
The discussion of school physical infrastructure that follows is by no means comprehensive. The intention is to highlight certain key issues, and to emphasise the need for a much better informed and holistic framework for physical infrastructure development than what currently exists.

11.1 Adequacy of physical infrastructure

Significant improvement

The School Register of Needs (SRN) collected school physical infrastructure data in 1996 and again in 2000, and the Department of Education is currently converting this system to a real time system that will provide updated information on the state of school infrastructure at any point in time for national, provincial and local planners. The SRN data indicates that there have been a number of significant physical infrastructure improvements between 1996 and 2000. For example, percentage of schools with access to electricity improved from 42% to 55%, whilst the figure for access to a telephone improved from 41% to 65%. Both these figures improved at a faster rate than for households, though, in 2000, schools still lagged behind households in terms of the level of electrification. The introduction of the infrastructure grant in 2001 brought about more than a tripling in capital investment for public ordinary schools between 2000 and 2002. Despite improvements, however, physical infrastructure is the education input that is most unequally distributed amongst schools, as it is the input where the apartheid legacy is the most difficult to eradicate. The following graph displays the inter-provincial inequalities.

Figure 24: Average school infrastructure index per province (2000)[25]

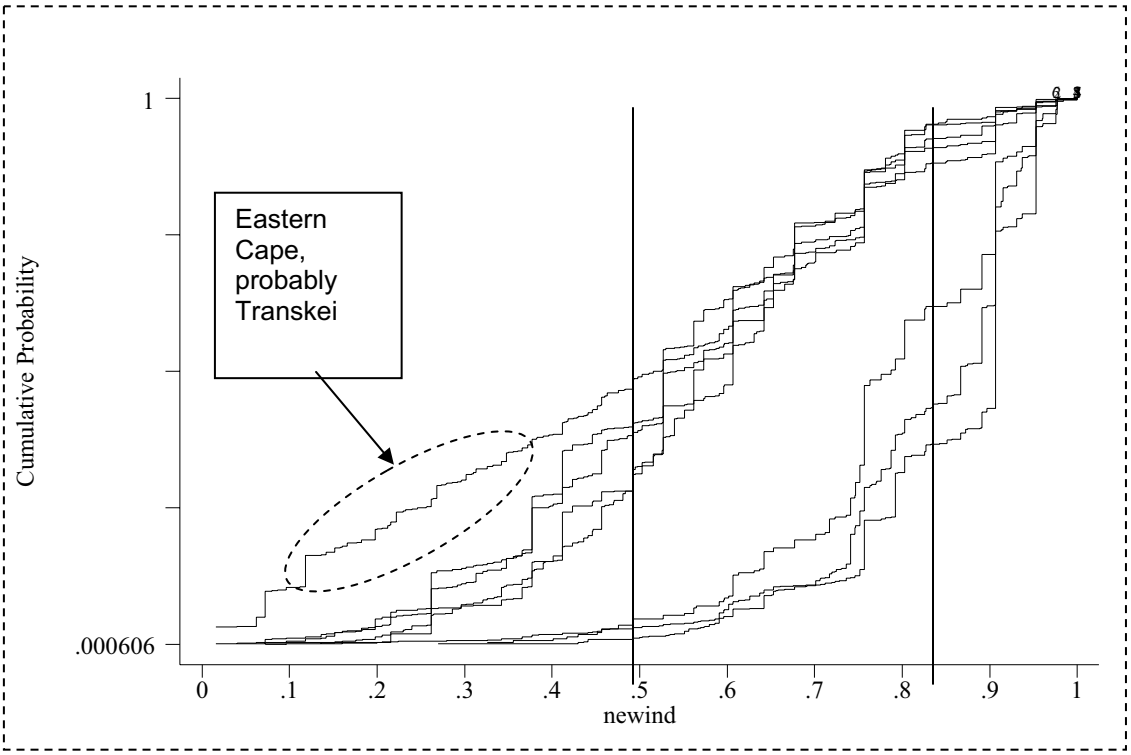


Deep poverty in some provinces

An important feature that the above graph does not reveal, but the following graph does, is the difference between Eastern Cape and the two other large and poor provinces. In Eastern Cape, there is an exceptional concentration of schools at the bottom end of the infrastructure index. In fact, over 25% of schools in Eastern Cape can be considered to be extremely disadvantaged in terms of physical infrastructure, whilst the figures for the other poor provinces lie at about 10%. This is due to a large degree to the apartheid legacy of the Transkei ex-homeland. Infrastructure investment in Transkei under apartheid was particularly low, even in comparison to other ex-homelands like Ciskei, also situated in the Eastern Cape.

[25] Data source is the 2000 School Register of Needs. The index was built from a variety of infrastructure fields, and refers to primary schools only.

Figure 25: Distribution of physical infrastructure deprivation across provinces (2000)[26]



What is a backlog?

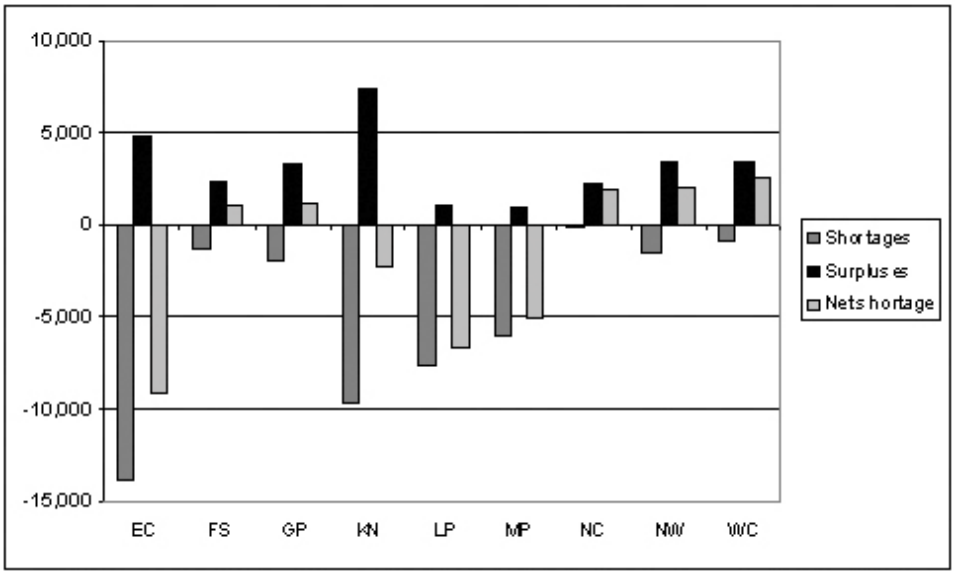
Currently, determination at the national level of funding for infrastructure backlogs rests mainly on the question of so-called classroom backlogs. This is problematic for a number of reasons. Firstly, the infrastructure quality nuances that are captured in the above graph are lost. Secondly, the current approach assumes that the country should give provinces equal funding relative to backlogs concurrently, in other words that there should be no phasing, whereby, for instance, resources would to some degree be concentrated on a particular province for a couple of years, before the focus moved to another province. A phased approach has certain advantages in terms of more effective use of planning capacity, and in terms of the development of best practice models. Phasing, as opposed to a broad sweep approach, should be considered as an option. The next section indicates another important reason why the classrooms backlogs indicator needs to be used with caution.

[26] This graph is copied from Dr Luis Crouch's 2003 study into equality in education. The horizontal axis refers to the physical infrastructure index. Vertical lines are inserted at the national median level of 0.67 and at half of this level. The vertical axis refers to cumulative percentage of schools in each province. The three curves that begin to rise strongly only after the median level refer to the three non-poor provinces of Gauteng, Western Cape and Northern Cape.

11.2 Infrastructure and migration in the schooling system

The next graph shows the degree to which the gross sum of classroom shortages across schools (which is what is used in the determination of education backlogs in the equitable share formula) differs from the net classroom shortages figure, which takes into account classroom surpluses in other schools. The KwaZulu-Natal figures are particularly instructive, as the high number of surplus classrooms implies a large difference between gross and net classroom shortages.

Figure 26: Classroom shortages and surpluses[27]



Are schools in the right place?

There are many reasons why the two figures would vary. Occasionally poor infrastructure planning, or local political pressures, have resulted in the building of schools in areas where population was declining, or where there was not really a demand for more schools in the first place. Massive learner migration from qualitatively worse to better schools can be considered a major cause of classroom shortages in some schools. Some schools have used language policies and other means to block the entry of certain learners, often poor and black learners, although not all classrooms in the school were utilised. These factors have not received sufficient attention in the education planning process, and have arguably led to much inefficiency in the utilisation of resources. South Africa allows a high degree of freedom when it comes to choice of school relative to place of residence. At the same time, quality differences between schools are often large, and quality in one school can vary enormously from one year to the next. A study conducted in the Western Cape has shown how large and unstable the inter-school migration flows are. Freedom of movement for learners is a fairly entrenched right in the

[27] Source data is from the 2000 School Register of Needs. The assumption was made that classroom adequacy was represented by a number of classrooms equal to at least the number of state-paid educators in the school. School principals in schools with more than 650 learners were excluded from the calculation. Specialised classrooms were counted as classrooms, but not media centres were excluded from the calculation. The provincial figures add up to national totals of: shortage of 42,933; surplus of 28,814 and net shortage of 14,119.

country, which cannot easily be limited by the state, especially given the apartheid legacy in this regard. The challenge, then, is to deal with the quality issues, but also to avoid the temptation to spend scarce resources extending the physical infrastructure of well performing schools, whilst poorly performing schools in the vicinity are left with empty classrooms.

11.3 Capacity for proper physical planning

Innovative solutions and planning frameworks

The DoE has made a number of interventions to improve physical planning capacity in the PEDs. During 1999, state of the art Geographical Information Systems (GIS) hardware, software and training was rolled out to physical planning offices in all provinces. However, the lack of a well-informed and comprehensive planning framework, that takes into account issues like the management of migration, has limited the quality of physical planning. Such a framework is currently being produced by the DoE in collaboration PEDs. Physical planning is a complex matter, involving not only questions of engineering and construction, but also the optimal translation of the evolving curriculum into learning spaces, the exploration of credible and value-adding public private partnerships (PPPs) as well as managing, to some extent, and responding adequately, to migration patterns. It is critical that capacity for this planning, from the national to the local level, be vastly improved over the coming years to ensure a better utilisation of resources.

11.4 Recommendations

A policy and an implementation recommendation flow from the above discussion on the physical infrastructure of schools.

The finalisation of a comprehensive capital investment and maintenance policy

The Department of Education should:

- Conclude the formulation of a schools capital investment and physical planning policy, as well as the production of well-informed and open-ended planning tools that can be adapted to local contexts. International best practice in physical planning should inform the process. The result of this work should be better prioritisation of construction and maintenance projects, physical structures in schools that better reflect the requirements of the curriculum and, importantly, better learner performance. The overall framework should begin to inform infrastructure development in 2004.
- Focus on vastly improving capacity at the provincial and local levels to deal with the complexities of physical planning. ‘Physical planning’ should be understood as the whole range of planning issues to ensure the availability of physical spaces for learners, including the issues of school quality, migration and school admissions.

A more strategic prioritisation from the national level of schools infrastructure development

The Department of Education should:

- Pursue revisions to the current weightings that inform funding for the tackling of infrastructure backlogs in the provinces. Weightings should capture more accurately the quality of existing buildings, and the possibility of utilising excess classrooms.
- Formulate, in consultation with PEDs and the National Treasury, a new medium to long term capital investment plan. This plan should be in line with the capital investment policy being finalised. National prioritisation of pockets of severe infrastructure deprivation, and a phased approach should be considered as options. The plan would go beyond the usual 'bricks and mortar' approach, and consider measures relating to migration, quality and transportation that can optimise the physical infrastructure situation in the schooling system. Work on the formulation of this plan should commence in 2003.

12

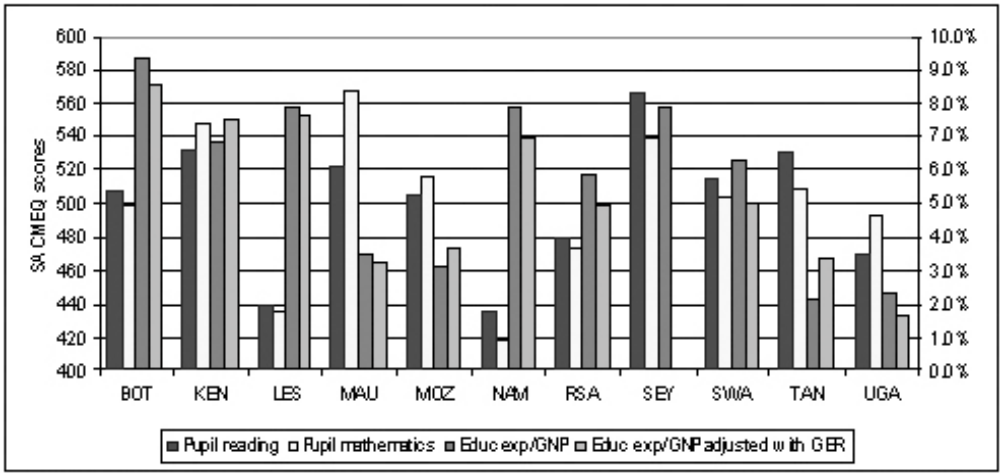
Translating school resources into learner performance

This section deals with the last of the ten focus areas of the Report. The translation of school resources into learner performance is obviously of critical importance. It is also an area that is often badly understood, and under-emphasised in our education debates. Focus on learner performance tends to revolve around the Matric examinations. Focus on the relationship between inputs and outputs, or the efficiency question, is even more limited. This section will provide a brief look at this efficiency question, and a critical recommendation for improving the situation.

12.1 Empirical evidence

There is considerable evidence indicating that quality of education in South African schools is worryingly low relative to what South Africa spends on schooling. The following graph is an example of this evidence.

Figure 27: Learner performance and education expenditure over GNP (2000)[28]



Quality output in relation to inputs

South African learners in Grade 6 achieve a level of reading and mathematics proficiency that is better than that of our neighbours Lesotho and Namibia, but lower than that for almost all other countries in

[28] Data source is the 2000 Southern African Consortium for Monitoring Educational Quality (SACMEQ) sample survey of Grade 6 learners conducted in 2000. The adjusted education expenditure over GNP figure is simply the original figure multiplied by 100 over the gross enrolment rate (GER). This provides a statistic that is more comparable across the countries, considering that not all countries have the same GER. The expenditure over GNP values should be read on the right-hand vertical axis. SACMEQ is a UNESCO initiative.

the region. Yet investment in education, viewed as education expenditure over the gross national product (GNP), is higher in South Africa than in many of the countries that achieve better scores than ourselves. And expenditure per learner in absolute terms is higher in South Africa than for any other country in the above graph, with the exception of Botswana. To mention just one example, scores measuring reading skills amongst Tanzanian learners are about 50% higher than South Africa's scores. Yet Tanzania spends about half as much as South Africa in terms of expenditure over GNP, even if we adjust the expenditure indicator to cater for the fact that Tanzania enrols a smaller proportion of the school age population than South Africa.

The legacy

There are deep-running reasons for this situation. Despite severe problems of poverty, a country like Tanzania has for forty years enjoyed relative peace and post-colonial governments committed to educational quality. South Africa, on the other hand, has for most of this period experienced government that, as a deliberate policy, suppressed quality of education for the vast majority of the population. This tragic legacy, which is to a large extent manifested in the continuing inadequate skills of the teacher and school management corps, has been actively tackled since 1994. However, the nature of the problem is such, that it should not surprise us that the country's backlog in terms of educational quality should still be very noticeable in international comparisons. It is important that Government and the schooling system as a whole be continuously reminded of our performance relative to other countries, especially other countries with similar problems of poverty and a colonial legacy. Quality improvements in learner performance relative to our own past should be celebrated, but should not make us complacent. South Africa still has a long way to go before we can say that we are obtaining educational returns that can be justified by the economic investment of the country in education.

12.2 The scope for improved monitoring

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. However, Government is actively adding to and improving these mechanisms. We can probably safely say that we currently have an under-utilisation of the data emerging from even existing performance monitoring mechanisms. In particular, there is currently inadequate attention paid to the potential for integrating databases.

Current and planned monitoring mechanisms are the following:

Á The first ever fully-fledged Systemic Evaluation of the DoE was conducted in 2001. This evaluation covered a sample of 50,000 Grade 3 learners and tested their basic language, mathematical and life skills competencies. Current plans are for similar evaluations to be conducted in 2003 (Grade 6), 2005 (Grade 9) and 2006 (Grade 3 again).

- SACMEQ has so far involved testing a sample of Grade 6 learners (about 3,000 in South Africa) every five years in eleven Southern and East African countries. It is likely that this pattern will continue.

- An annual and nationally moderated universal Grade 9 assessment, for the General Education and Training Certificate (GETC), begins in 2003.

- The Matric examinations test around half a million Grade 12 learners in public schools each year.

- The Whole School Evaluation (WSE) programme covers all schools in the country on a cyclical basis, and collects data on a variety of school features grouped under nine headings, one of which is learner performance.

- The Department of Education will, in 2003, commence working on the development of an integrated quality management system for education. This system will seek to integrate existing policies related to education quality management.

Strengthening measurement of learner achievement

The Department of Education has identified the need integrate to the various assessments into one evaluation model, including the integration of the data emerging from the different assessments. Although this is not be an easy task, it is one that is very necessary. The major benefit of single evaluation model is that it would provide a more holistic view of the performance of the system. It is possible to develop local and provincial profiles of learner performance, which could assist in identifying pockets of excellence and mediocrity. Moreover, breaking up all profiles by poverty quintile is possible. This would assist in viewing learner performance relative to poverty of communities, and hence barriers to learning. As investments in education necessarily have different returns depending on socio-economic factors like poverty, this kind of breakdown is necessary.

The information integration would in itself render valuable information about how adequate our monitoring systems are, and what the priorities should be in terms of developing new assessment mechanisms, in particular at the lower GET grades.

12.3 Constructive community pressures on schools

A public empowered with more comprehensive information about the schooling system would almost certainly exert positive pressure on institutions and leaders to account for educational performance. For this reason, it is proposed that the following, which would emerge from the data integration exercise, become very visible public information:

- Average scores according to the different monitoring mechanisms in existence, organised by both geographical area (province and local area) and poverty quintile of schools.

Published performance scores

- Differences between the average scores and what the DoE would regard as reasonable normative levels of achievement. The

normative levels would be based on extensive analysis of what schools in various categories are able to produce, including performance data from other countries.

Empower parents to make value judgements

One could expect pressure from the public for school-level data to become available. Ideally, this data should be widely available. Clearly, parents of learners in a particular school should have access to the average scores of that school, wherever possible. The use of league tables, however, is not advised because of the perversions and unintended consequences that has been associated with this practice in other countries. Scores down to the level of the school circuit or district have the potential to generate very valuable pressures for school and PED managers to account for poor performance, or explain to neighbouring districts how higher than average performance was achieved.

12.4 Recommendation

An integrated performance monitoring system that is accessible to the public

The Department of Education should:

- Invest in a system that integrates existing performance data from schools and produces performance scores specific to the country, provinces, sub-provincial units down to the district/circuit, and poverty quintiles.
- Research input-output trends in South African schools (as part of the research into production functions) and in other, similar schooling systems in order to arrive at normative scores that can be used to gauge the performance success of schools with varying levels of resourcing, and varying levels of socio-economic disadvantage.
- Produce comprehensive and user-friendly statistics for public consumption that will allow comparisons between provinces and districts/circuits in terms of learner performance. Both absolute scores and scores that factor out socio-economic variations should be provided. Normative scores that will allow the public to assess where the schooling system is functioning best, and worst, should also be made available. Public dissemination of this information will be aimed at producing constructive debate and pressures, and will begin during 2004.

13

Summary of recommendations

The following matrix lists all the recommendations made in the Report and explains the potential impact of each recommendation in terms of four critical areas:

- Á Adequacy of state allocations to schools
- Á Translation of monetary inputs into school resources
- Á Translation of school resources into learner performance
- Á School fees and other private inputs demanded by schools

13.1 Diagrammatic representation of the envisaged improvements

	Adequacy of state allocations in schools	Translation of monetary inputs into school resources	Translation of school resources into learner performance	School fees and other private inputs demanded by schools
FINANCIAL TRANSFERS: FROM THE NATIONAL LEVEL TO THE SCHOOL				
An education budget monitoring and support office Improved budget analysis capacity. An education budget monitoring and support office to provide valuable support to PEDs. Monitoring of pro-poor funding. Involvement in ESF review process.	Current budgetary practice often undermines school-level resourcing.			Better allocations relieve pressure on households.
PERSONNEL RESOURCING AND MANAGEMENT				
More efficient and practical teacher utilisation techniques Discussions with teacher organisations to arrive at practical teacher utilisation study. School timetabling support. Examination of mix of technology in the classroom. Assessment of the L:E ratio. Better administrative support in schools.			Efficient utilisation techniques are a prerequisite for stability and a professional workforce, which in turn contributes to better teaching.	
Strengthening of current initiatives to develop teacher capacity and reward professional excellence Whole range of quality issues, from curriculum knowledge to values and morale. Rewards for educators who develop their own professional capacity.			Efficient educators are needed to ensure that non-personnel resources contribute to quality of learning.	
TRANSLATING SCHOOL ALLOCATIONS TO APPROPRIATE NON-PERSONNEL RESOURCES				

	Adequacy of state allocations in schools	Translation of monetary inputs into school resources	Translation of school resources into learner performance	School fees and other private inputs demanded by schools
Organisational and systems improvements to support effective procurement of goods and services for schools Improved services to non-section 21 schools and service delivery assessments by the schools themselves. Roll-out of best practice across the country to improve school level financial and resource management. Study into support needed by increasing number of section 21 schools in the longer term. Solutions to the current non-section 21 saving problem. Tackling of excessive water and electricity consumption.		Lacking capacity in PEDs to procure on behalf of schools has been identified as a major systemic weakness. Currently, non-section 21 schools are at an economic disadvantage due to their inability to save for larger investments. There is evidence that excessive and wasteful electricity consumption is crowding out other inputs.		
INFLUENCING THE PRICES OF EDUCATION INPUTS				
Negotiations and systems to lower the prices of school inputs Open contracts negotiated by Government on behalf of schools. Securing of preferential rates from utility and telephone companies. Provisions for non-section 21 schools to procure at market prices.	Prices that schools must pay have a direct impact on the adequacy of the allocation.			
Measures to lower the price of textbooks Research into the efficiency of the textbook market. Better lines of communication with the textbook industry. Greater coordination of the textbook ordering process to produce economies of scale.		South African textbooks are more costly than they should be, which limits the ability of schools to buy books.		

	Adequacy of state allocations in schools	Translation of monetary inputs into school resources	Translation of school resources into learner performance	School fees and other private inputs demanded by schools
Measures to reduce the cost of uniforms Elimination of sole supplier markets. Engagement with clothing industry. Long range fundamental change.				School uniforms should lower, not raise the costs of clothing children.
PRESERVING PHYSICAL ASSETS IN SCHOOLS				
Improved asset management systems in schools Better accounting of physical assets. Storage facilities and management improvements for the preservation of assets.		Better preservation of assets means lower replacement costs, which improves the overall resourcing of the school.		
Systems for higher textbook retrieval rates in schools Better measurement and monitoring of textbook retrieval rates. Schools-based capacity to retrieve books and system-wide tracking of which learners have received books from the state. Integration of retrieval targets into general school management processes.		Annual textbook losses are huge, resulting in wasteful expenditure and shortages of books in the classroom.	Better preservation of LSMs means fewer LSM-deprived classes.	
RESPECTING BASIC HUMAN RIGHTS				
Campaigns, education and prosecution to reduce the marginalisation of poor learners A campaign to counteract the marginalisation of the poor by bureaucrats and teachers. Stronger disciplinary action against transgressors.				Financial burdens placed by schools on poor households are often unjust and illegal.
SCHOOL NUTRITION				
School lunches for all poor GET learners Strategies to counter organisational failure in the roll-out of feeding schemes. Better research on the value added by school feeding schemes. School involvement through e.g. vegetable gardens. Minimum goal of ensuring that all poor GET learners receive a balanced meal on each school day.			School lunches have been proven to improve learning and attendance in poor schools.	School lunches would provide significant financial alleviation for poor households.
NATIONAL NORMS AND STANDARDS FOR SCHOOL FUNDING				

	Adequacy of state allocations in schools	Translation of monetary inputs into school resources	Translation of school resources into learner performance	School fees and other private inputs demanded by schools
Completion of specific education resourcing studies Formulation of a costed minimum package required by learners, to be used as a benchmark for planning. Research into optimality of the pro-poor distribution curves currently used. Extensive research into education production functions in South Africa.	A well-known and well-informed benchmark will make it much clearer where inadequacies in the system are concentrated.		We need a clearer sense of what mix of school inputs best supports learner performance.	Better allocations relieves pressure on households.
A national resource targeting list approach to ensure adequate non-personnel recurrent funding in all poor schools Greater clarity around what items are procured using the school allocation, and what items are procured through other means. Better understanding of where allocations are inadequate. Investigations into a national poverty targeting approach that would treat equally poor learners across the country the same in terms of non-personnel recurrent inputs. Possible amendments to the current method of determining school poverty. Clearer policy statement on poor learners attending non-poor schools.	It is a national priority to ensure that no poor learner is funded below a reasonable minimum level.			Better allocations relieves pressure on households.
More stringently monitored and better informed fee-setting processes Improved monitoring of fees charged in public schools. Steps against demands for 'hidden' fees. Broader participation of parents in fee-setting processes. More stringent enforcement of procedures laid down by policy. Adequate public resourcing to eliminate need for fees in poor schools.				Reducation of school fees will alleviate financial burden of schooling on households.
Fairer and more effective exemptions processes that are fully integrated into Government's poverty alleviation programmes Possible alignment of fee eligibility with eligibility for welfare grants. Removal of fee, and hence exemptions pressures in poor schools.				Undue pressures will be relieved if those who cannot pay fees, are all exempted.

	Adequacy of state allocations in schools	Translation of monetary inputs into school resources	Translation of school resources into learner performance	School fees and other private inputs demanded by schools
Transport assistance to poor learners Investigations into alternatives to school bus approach. Greater capacity of households to afford transport costs due to alleviation of pressures in other areas.				With the elimination of other pressures, transport cost pressures also diminish.
INFRASTRUCTURE DEVELOPMENT				
The finalisation of a comprehensive capital investment and maintenance policy Policy and tools to assist physical planning at the local level. Holistic approach to school infrastructure, migration, admissions and school quality.		Currently, utilisation of infrastructure is inefficient, due partly to poorly managed learner migration.		
More strategic prioritisation from the national level of schools infrastructure development Changes to measurement of backlogs. Comprehensive national plan informed by better information about local need, and an improved capital investment framework.		Better targeting of pockets of extreme infrastructure deprivation will benefit the poor.		
TRANSLATING SCHOOL RESOURCES TO LEARNER PERFORMANCE				
An integrated performance monitoring system that is accessible to the public Integration of data from current performance monitoring mechanisms. More intensive research into feasible targets for outputs according to geographical area and poverty quintile. Publication of average and normative performance scores down to the level of the district/circuit in order to improve accountability in the system.			Empowerment of parents and community organisations with information about performance will assist in creating reasonable and well-informed pressures for quality enhancement.	

Abbreviations

The following are the commonly used abbreviations used in the text of the Report.

ABET	Adult basic education and training
DoE	Department of Education
ECD	Early childhood development
EMIS	Education Management Information System
ESF	Equitable share formula
FET	Further education and training
GET	General education and training
IES	Income and Expenditure Survey
LSM	Learner support material
MTEF	Medium Term Expenditure Framework
NEPA	National Education Policy Act
PED	Provincial Education Department
PFMA	Public Finance Management Act
POS	Public ordinary schools
RTL	Resource targeting list
SACMEQ	Southern Africa Consortium for Monitoring Educational Quality
SASA	South African Schools Act
SE	Systemic Evaluation
SGB	School governing body
SMME	Small, medium and micro enterprise

The following abbreviations for provinces are used in the graphs. The use of the old abbreviation for Limpopo in some graphs is due to the fact that these graphs were generated off systems that still use the old 'NP'.

EC	Eastern Cape
FS	Free State
GP (or GT)	Gauteng
KN	KwaZulu-Natal
LP (or NP)	Limpopo (formerly Northern Province)
MP	Mpumalanga
NC	Northern Cape
NW	North West
WC	Western Cape

Reference group

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