The medium term expenditure reviews are compiled on behalf of the Budget Office as inputs to the budget planning process. They need not reflect the views of the Departments of Finance and State Expenditure, provincial treasuries or other departments represented in the review teams.

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Contents

Executive summary ........................................ Page 6

1. Introduction ........................................... Page 8

2. Evaluation of the 1997 report ....................... Page 11

   3.1 Introduction .......................................
   3.2 Review of provincial education spending
      3.2.1 Growth of budgets and expenditure
      3.2.2 Trends in personnel and non-personnel spending
      3.2.3 Over-expenditure
   3.3 Inter-provincial analysis
      3.3.1 Share of education in total spending
      3.3.2 Spending per learner
      3.3.3 Learner-educator ratios
      3.3.4 Educator costs
   3.4 Credibility of the education budgets
      3.4.1 Defining credibility
      3.4.2 Some comments on the 1998/9 budgets
      3.4.3 Medium-term credibility
   3.5 Data problems .......................................
   3.6 Conclusion .........................................

4. Personnel ............................................... Page 28
   4.1 Inefficiency problems in the system ............
   4.2 Key policy initiatives on personnel: 1994-1998
      4.2.1 Post provisioning norms
      4.2.2 Redeployment
      4.2.3 Collective bargaining on remuneration
      4.2.4 Managerial tools to enhance educator productivity
      4.2.5 COLTS Campaign and educator personnel management
   4.3 Personnel policy options
      4.3.1 Numerical aspects
      4.3.2 Details of costing simulations
      4.3.3 Five policy options
      4.3.4 Other policy suggestions
5. Management and quality

5.1 Introduction

5.2 An overview of the 1998/99 conditional grant to Education

5.3 Management and cost control issues
   5.3.1 Learner support materials
   5.3.2 System inefficiencies
   5.3.3 Examination systems
   5.3.4 Transfer payments

5.4 Ideas on 1999/2000 conditional grant

6. Funding skills development

6.1 Policy context

6.2 Expenditure and enrollment
   6.2.1 Data on skills development
   6.2.2 Youth colleges
   6.2.3 Training budget of the Department of Labour
   6.2.4 Adult basic education and training
   6.2.5 Conclusion

6.3 Efficiency challenges in skills development
   6.3.1 Low learner-educator (L:E) ratios
   6.3.2 Small institutions
   6.3.3 Poor throughput rates
   6.3.4 Proliferation of courses
   6.3.5 Costly examination processes
   6.3.6 Under-utilisation of facilities
   6.3.7 Low success rates
   6.3.8 Conclusion

6.4 Future policy options
   6.4.1 Further education & training
   6.4.2 Adult basic education and training

6.5 Conclusion: expenditure recommendations

7. The financing of higher education

7.1 Introduction

7.2 Current funding of universities and technikons

7.3 Issues in the funding of higher education

7.4 Future funding patterns
8. Conclusion

8.1 Further research required
   8.1.1 Incentive schemes
   8.1.2 ‘What works’ in Education?
   8.1.3 Relationship between human development and economic growth
   8.1.4 Public/private partnerships
   8.1.5 Data requirements

8.2 An integrated solution for the education sector

8.3 Other specific recommendations
   8.3.1 Initiatives currently underway
   8.3.2 Enquiry into cost effectiveness of the examination system
   8.3.3 Education conditional grant
   8.3.4 Further Education & Training
   8.3.5 Adult Basic Education & Training
   8.3.6 Establishment of a Finance/Education ‘4 x 4’
   8.3.7 ‘4 x 4’ to take up the question of financing capital backlogs

Appendix on the provincial implementation of the proposals

List of participants in the 1988 MTEF Education Sectoral Review Team
List of Tables

Chapter 3

3.1 Education budgets and expenditure by province - 1995/96 to 1998/99
3.2 Share of education in overall provincial budgets
3.3 Projected per learner expenditure for 1997/98 in Rands
3.4 Learners per educator at the school level for 1998
3.5 Per learner budgets for personnel and non-personnel items in 1998/9
3.6 Budgeted costs per CS educator for 1998/99

Chapter 4

4.1 Average period load: current and targets for 2003
4.2 Option A: no policy changes
4.3 Option B: minimal policy changes
4.4 Option C: increased learner: educator ratio
4.5 Option D: personnel share reduced to 85%
4.6 Option E: wages decline by 1% and budgets increase by 1% per annum

Chapter 5

5.1 Budget for 1998/9 conditional grant to Education

Chapter 6

6.1 Expenditure on secondary schooling and technical colleges from 1995/6 to 1997/8
6.2 Estimates of expenditure for youth and community colleges
6.3 Expenditure on Gauteng Youth Colleges
6.4 Human resource development expenditure by the Dept. of Labour 1996/7 to 1998/9
6.5 ABET expenditure 1996/7 and 1997/8
6.6 National pass rates for Technical Colleges
6.7 Gauteng Youth College results for academic courses, Nov/Dec 1997
6.8 ABET results, Nov. 1996 and Nov. 1997
6.9 Department of Labour projected appropriations 1998/9 – 2000/1

Chapter 7

7.1 Proposed funding of universities and technikons, 1999/00 – 2001/02

Appendix

1 Results of provincial modeling of policy proposals
2 Fraction of provincial education budgets spent on non-personnel items
Executive summary

As our country enters its fifth year of a democratic government, it is clear that the long-term success of our country and our democracy depends to a large extent on the management of our investment in education. As a country, we already invest proportionately more on education than most countries in the world. The MTEF process intended to allow us to make better use of our investment.

This report reviews policy options that are currently being discussed in the education sector, attempts to cost these options, and make recommendations to decision-makers on the direction of the education funding system as a whole. The report is not intended to be a detailed financial planning exercise for education, or an education budget.

There is one central problem in South Africa’s education system: the poor quality of education delivered in the classroom has, over the years, has led to very poor outcomes. These outcomes contribute to high unemployment, low economic growth, high failure rates, high out-of-age enrolment and a low skills base in the country. Other problems in education are either related to this problem, or are relatively insignificant in relation to the problem of educational quality in the classroom.

It is this problem that must be solved over a period of time with the right policies, agreements, political backing, incentives and penalties. This report identifies a number of possible solutions or related strategies, all geared towards improving quality in the classroom. These are:

- Increased work effort in the classroom;
- Improved educational support for teachers and schools;
- Measures to evaluate performance in the education system;
- Involving parents in holding schools accountable for results;
- Improving school management;
- Improving district and head office management;
- Improving information capacity and information flow in the system;
- Reducing costs of non-personnel inputs through efficiency savings and better planning;
- Diversified subject choices at the further education level; and
- Equity in the distribution of resources down to school level.

Government is prepared to spend money on programmes that will specifically improve the management and quality of education. The R200 million made available in 1998/99 and the R400 million being made available in 1999/2000 should only be used for programmes that will improve educational quality in the classroom.

On the expenditure side, the education system is heading towards a serious crisis. The problem is a simple one. Assuming:

- The cost per teacher were to remain flat, in real terms;
- The L:E ratio (or class size) remains the same (which would mean about 3000 new teachers per year, in addition to the replacement of the approximately 10 000 teachers leaving every year); and
- The budget remains constant in real terms.

then provincial education departments face a deficit school education of between 12% and 15% by 2005. This situation must be avoided, so one or more of the three variables must be
changed. Either the cost per teacher must decrease, or the number of teachers must decrease or the budget must increase, or some combination of all three must occur. These difficult choices must be made soon rather than allow the system to amble on, thus making a choice by omission rather than informed policy.

The solution recommended in this report is the following:

- Increase education expenditure by about 1% in real terms per year up to 2004/2005;
- Reduce teacher salaries by 1% a year in real terms;
- Allow L:E ratios (hence class sizes) to increase by 3 from 34 to 37 by 2005.
- This will require a reduction of about 4000 teachers per annum, which will come about as a result of natural attrition. In other words, from the 10000 teachers that leave the system, only 6000 new ones should be hired;
- Increase non-personnel expenditure to 15% of education expenditure; and
- Implement efficiency measures such as increased teacher workload, lower teacher substitution and other measures aimed at improving the quality of teaching in the classroom.
- A greater effort is required to decrease the incidence of out-of-age enrolment.

Since there are differences in the cost per educator, the L:E ratio and the level of funding on education across the provinces, the implementation of this proposal will require more careful analysis using provincial data and the projected level of funding in a province. Intra-provincial equity needs to be addressed within this broad framework.

The proposal has a number of advantages. Firstly, there is an acknowledgement that any additional money that is spent on education must go directly to programmes aimed at improving quality in the classroom. Education cannot afford for additional resources to be consumed by inefficiencies in the system. Secondly, job security would be guaranteed, since no retrenchments are required. Thirdly, improvements in pass rates (resulting from improved teaching) would decrease class sizes in the long-term. Fourthly, more resources will be freed up for non-personnel expenditure. Fifthly, education financing would be stabilized through certainty in the budget process.

Our further education and training sector is characterised by a high level of funding with relatively few individuals undergoing vocations training. The serious shortage of skills in the labour market, especially amongst young people, if affecting economic growth and contributing to high unemployment. The effectiveness of our FET system is poor. Pass rates are low, drop-out rates are high and job placement is very limited. This report draws on the FET white paper, the skills development strategy of the Department of Labour and developments in ABET to suggest greater integration of the FET sector, more coordination between government departments as well as a new funding strategy to increase subject diversity in the sector.

In conclusion, the 1998 Education MTEF sectoral review details the current trends in the education system, reviews existing policies and provides a detailed argument for a number of programmes or initiatives required to improve education quality and achieve stability in the budget process.
Chapter 1: Introduction

As we plan for the 1999/2000 budget year, we enter the second year of the medium term expenditure framework (MTEF). The MTEF process is a multi-year budgeting system that allows government to plan expenditures in advance for a number of years. Education constitutes the single largest investment in South Africa, either private or public. The MTEF process allows us to evaluate our investments, review our current thinking and plan for the future in an environment in which education will play an increasingly important role.

As our country enters its fifth year of a democratic government, we all realise it is clear that the long-term success of our country and our democracy depends on the management of our investment in education. As a country, we already invest proportionately more into education than most countries in the world. The MTEF process provides a means of seeking ways to make better use of our investment in order to achieve a society that is prosperous, harmonious and innovative.

This report is not a detailed financial planning exercise for education for the next three years. It is also not an education budget. Instead, the report reviews policy options that are currently being discussed, attempts to cost these options, and make recommendations to decision-makers on the direction of the education funding system as a whole.

The Education Sectoral Review Team is one of six established by government to provide decision-makers with policy choices that are carefully considered, costed and technically sound. The other MTEF sectoral teams are for health, welfare, the criminal justice system, infrastructure investment and personnel. Naturally, there will be some overlap between the work of the education team and other teams, in particular the personnel team. The brief of this report is to focus on cross-cutting issues that affect education and education finance.

The MTEF Sectoral Review Teams were set the following broad terms of reference:

- To identify and examine the main spending and budget trends;
- Identify key policy options contributing to both rising spending pressures and to expenditure reduction possibilities; and
- To prepare recommendations for improved expenditure management, possible reprioritisation and policy changes aimed at more cost-effective service delivery.

The MTEF Sectoral Review Teams are not policy-making bodies. Policy is the function of the line department. The MTEF process (for this team) entails bringing the national departments of education and finance, provincial education departments and provincial treasuries together to review developments in the education sector as well as review current ideas on improving the education system in general and education finance in particular. The education sectoral review team will present its recommendations to the Council of Education Ministers for consideration and then to the joint Education / Finance forum of ministers and MECs. This process allows the MTEF reports to influence both the political and technical process of budgeting and planning.

The first meeting of the MTEF Education sectoral team was held on 10 July 1998. This meeting was well attended by national and provincial finance and education departments. A list of the team members can be found at the end of the report. This meeting identified four main areas that the team should focus on. The four areas were budget trends, personnel issues, management and quality, and the funding of skills development. For this purpose, four teams or sub-groups were established.
In addition to these main focus areas, the sectoral team also had to evaluate the impact of the 1997 MTEF report, the 1998/99 education conditional grants and the higher education sector.

This year, the Education MTEF sectoral review team also held two discussions with the South African Democratic Teachers' Union (Sadtu), the National Professional Teachers' Organisation of South Africa (Naptosa) and the Suid Afrikaanse Onderwysers Unie (SAOU) on the outline of the report as well as the key ideas contained in the report. The purpose of this consultation was to strengthen the ideas contained in the report by receiving input from an important stakeholder. In addition, the meetings with the unions sought to bring about a more consultative and transparent approach to reviewing the education budget. The sectoral team and hence the report, is all the richer from this interaction.

The sectoral team also met with the government education labour caucus to discuss specific aspects of the report that deal with personnel issues. In this meeting, the sectoral team was informed about developments in the consultation between the Minister of Education and the teaching unions on the issue of norms and standards for post provisioning. The sectoral team gave the caucus an outline of the budgetary constraints of the education system as well as the pressures that wage drift and other personnel policies place on the budget outlook.

This year’s report is strengthened by the participation of the Deputy President’s Office, in particular the Coordination and Implementation Unit in this office. The sectoral team also received input from the Department of Labour on the section in the report on skills development and the Further Education level.

As in the 1997 report, this report includes a chapter on the higher education sector. The purpose of including this chapter is to give the reader a comprehensive overview of the financing of education. National and provincial governments share responsibility for education with higher education being exclusively a national government function. It must be noted that this chapter was produced by the Department of Education and was not a product of the sectoral review team.

The report begins with a detailed review of expenditure trends over the past four years. The 1997 report was a comprehensive review of education policies as well as funding practices in the system. Chapter two contains a brief review of last year’s report as well as an indication of the impact of the report on the policy, budgeting and planning environment in education. The main theme of the 1997 report was quality enhancement and efficiency. The report dealt in depth with the issues of flow-through, pass rates, over-enrolment and inequity in the system.

This year’s report reinforces the issues raised in last year’s report but has a slightly different theme. The 1998 report focuses centrally on the issues of personnel, post-provisioning, teacher quality and management at a school or district level (including teachers). The report presents a set of policy options for government as a whole to improve the quality of teaching, provide better incentives to good teachers and personnel planning.

One of the main findings of last year’s report was the high number of young adults still within the school system. Learners spend an enormous amount of resources to remain in a system that is not geared to provide them with the basic tools to enter the job market. Quality vocational and technical education for young adults can improve the efficiency of the school system, as well as give school leavers with a better chance of finding employment. This year, the Department of Labour has launched the Skills Development Strategy. The Department of Education has issued a white paper on the Further Education and Training (FET) sector. The vast majority of learners in the FET sector are in public ordinary schools. This report
also deals with some of the issues relevant to developing an effective and integrated approach towards the FET sector.

The section on budget trends ends with a cautionary note on the data used in this report. The sectoral team has gone to great pains to ensure that the data used is the best available. Nevertheless, there are inconsistencies in the data. These inconsistencies mainly arise from difficulties in getting good data for the period 1995/96 to 1997/98. The second reason for a problem in the data is that the definitions used in previous years are at best unclear. The data is getting better but inconsistencies must be dealt with through interaction within and between the Departments of Education and Finance at both tiers of government.

Lastly, the team would like to thank all the participants of the education sectoral review team, secretarial support as well as assistance in securing data that is often difficult to obtain. The 1998 education MTEF sectoral team was characterised by a very high degree of cooperation and enthusiasm between national government and provincial government. The spirit with which this document has emerged is testimony to the success of the cooperative governance model that South Africa has adopted. Within tiers of government, there is greater cooperation and understanding of issues from treasury and education officials. It is hoped that this spirit will continue to characterise interactions between the two sectors.
Chapter 2: Evaluation of the 1997 Report

In order to ensure that the MTEF process improves over time, it is necessary to evaluate the work of the 1997 team. This chapter will attempt to give decision-makers a sense of the main themes and recommendations as well as the impact of last year’s report so that this year’s report can be of more use to decision-makers. The 1997 report will be evaluated from a number of perspectives. We comment on a number of issues; namely, the technical quality of the document, the timeframes with which the report was drawn up, its grasp of the current policy environment, its impact on the 1998/99 budget, its impact on the policy debates and its impact on provincial education departments.

National and provincial governments as well as independent educationists praised the document for its technical proficiency and rigour. The education report was highly regarded amongst other MTEF sectoral teams.

The true strength of a document is judged by its impact on the policy environment. The 1997 Education sectoral report was able to focus debates towards a set of issues that were not in the forefront of debates in the education sector. Prior to this report, debates circled around issues of access to schooling, classroom backlogs, infrastructural deficiencies, inefficient procurement processes and the level of funding of education. The 1997 report was able to place a new set issues on the agenda that has, in some cases, sharpened the debates in the education sector.

The main success of the report was its focus on teaching quality as opposed to quantity. Within the context of educational quality, last year’s report raised issues of flow-through, pass rates and enrolment rates. The major conclusion from last year’s report was the main problem in education was one of improving quality in the classroom rather than extending access to education.

The 1997 report has given impetus in the development of policy on a number of specific issues. The department is about to release a policy document that deals with issues of out-of-age enrolment. Some of the other issues that were not picked up in this round of policy discussions are being dealt with presently in the ELRC, the FET white paper and this year’s MTEF report. The Western Cape Education Department has used the report to formulate its business plan for the medium term.

There were two principal weaknesses in last year’s MTEF process in education. The first was that the timeframes for producing the report were too tight. There was inadequate participation from political role-players. This means that a key section of decision-makers were excluded from the process and as a result, the document did not sufficiently assist policy-makers in making decisions. Hence the impact of the document was not as great as it should have been, given its technical strength.

The second problem that arose out of the tight timeframe was that the document did not have a direct impact on the 1998/99 budget. Although the report did not propose specific budgets, it did suggest options or directions for public expenditure that were consistent with improving quality at the school level.

Partly as a result of the conclusions in the 1997 report, national government did make a sum of R 200 million available as a conditional grant for improving financial and managerial capacity in the education system and for quality improvement. This year’s report outlines what these resources are to be used for.
In attempting to avoid the mistakes of last year, this year’s process included substantial opportunity for feeding into the political decision-making process around the budget. Through the Council of Education Ministers (CEM) and the joint education / finance MINMEC, there are opportunities for the issues raised in this report to be discussed and debated and should therefore have a greater impact on the policy environment.

Although the timeframe for this year’s report is similarly tight, the MTEF process is taking place earlier in the budget process than last year, and therefore should allow for more time to impact on the medium term budgets of national departments and provincial education departments.
Chapter 3: Budget and expenditure trends

3.1 Introduction

This chapter provides a detailed analysis of budget and expenditure trends on education over the past four years, including inter-provincial comparisons. The medium-term credibility of provincial education budgets are then considered. Finally, several cautionary notes regarding data are sounded.

3.2 Review of provincial education spending

Figure 1 and Table 3.1 give a composite picture of provincial education finance from 1995/96 to the present year’s budget. The following three-subsections draw this data to analyse the growth in actual expenditure, the driving forces behind that growth and the divergence between budgets and actual expenditure.

3.2.1 Growth of budgets and expenditure

Actual provincial expenditure on education rose from R29.3 billion in 1995/96 to R38.6 billion in 1997/98. This represents an increase of 31.7% over the three-year period. By comparison, the consumer price index increased by only 17% during the same period. Provincial education expenditure amounted to 6.3% of GDP in 1997/98.

The rate of increase varied considerably between provinces. The Northern Province and the Eastern Cape increased their education expenditure by 64% and 52% respectively whereas the Western Cape and Gauteng increased expenditure on education by only 10% and 19% respectively.

Most of the increase occurred place in 1996/97, with provincial education spending increasing by an average of 25% over 1995/96. The percentage increase in 1997/98 was only 6%, which was below the inflation rate. In real terms provincial education spending declined by about 2% in 1997/8.

There are a number of reasons for the increase in actual expenditures between 1995/96 and 1997/98. Without going into detailed analysis here, they can be listed as:

- High real salary increases as a result of broad banding, negotiated salary improvements, widespread hiring of new teachers, promotions and improvements in qualifications;
- Poor budgetary and financial management;
- As the merging of previous education departments was finalised, some expenditures which had previously been fallen under other headings were classified as education;
- A net increase in pupil enrollment, especially at the junior primary level; and
- The once off cost of Voluntary Severance Packages (VSPs) in provinces.

1 Broad banding refers to the merging of various salary categories from various departments into fewer levels or salary categories. In general, this resulted in most teachers receiving increases over and above the negotiated salary improvements.
Whether the large increase in expenditures in 1996/97 were as a result of deliberate policy or poor management, the 1997/98 fiscal year was not characterised by the same set of factors. From a policy point of view, this has implications for how we view solutions to the current budgetary problems. If the data points to a disturbing trend of large increases in education expenditures, then it is question of stopping this trend by getting to grips with the main causes of the increases. If, on the other hand, the data suggests that the large increases were a once off event that is still placing pressure on the budget, then our set of solutions would not merely entail cost containment measures. Instead, we would need a more complicated set of solutions that looks at managing within the present budget while improving quality; since the large increase in education expenditure must be justified by improvements in educational quality.
### Table 3.1 Education budgets and expenditure by province - 1995/96 to 1998/99

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<tr>
<th>Province</th>
<th>1995/96 Actual Expenditure R'000</th>
<th>1995/96 Main Budget R'000</th>
<th>1996/97 Actual Expenditure R'000</th>
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<th>1997/98 MTEF Budget R'000</th>
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<td>631 738</td>
<td>556 598</td>
<td>494 032</td>
<td></td>
</tr>
<tr>
<td>Total Expenditure</td>
<td>3 534 517</td>
<td>4 156 746</td>
<td>5 317 707</td>
<td>4 662 314</td>
<td>5 810 240</td>
<td>5 611 532</td>
<td></td>
</tr>
<tr>
<td>North West</td>
<td>2 065 676</td>
<td>1 833 175</td>
<td>2 518 447</td>
<td>2 363 347</td>
<td>2 879 543</td>
<td>2 795 752</td>
<td></td>
</tr>
<tr>
<td>Other Expenditure</td>
<td>408 800</td>
<td>496 894</td>
<td>447 150</td>
<td>382 746</td>
<td>307 127</td>
<td>300 373</td>
<td></td>
</tr>
<tr>
<td>Total Expenditure</td>
<td>2 474 476</td>
<td>2 330 069</td>
<td>2 965 597</td>
<td>2 746 093</td>
<td>3 186 670</td>
<td>3 096 125</td>
<td></td>
</tr>
<tr>
<td>Western Cape</td>
<td>3 048 331</td>
<td>2 700 906</td>
<td>3 663 970</td>
<td>2 930 692</td>
<td>3 411 884</td>
<td>3 216 882</td>
<td></td>
</tr>
<tr>
<td>Other Expenditure</td>
<td>419 208</td>
<td>472 483</td>
<td>499 712</td>
<td>372 663</td>
<td>429 527</td>
<td>378 483</td>
<td></td>
</tr>
<tr>
<td>Total Expenditure</td>
<td>3 467 539</td>
<td>3 173 389</td>
<td>4 163 682</td>
<td>3 303 355</td>
<td>3 841 411</td>
<td>3 595 365</td>
<td></td>
</tr>
<tr>
<td><strong>Total All Provinces</strong></td>
<td><strong>29 359 745</strong></td>
<td><strong>30 079 104</strong></td>
<td><strong>36 572 873</strong></td>
<td><strong>32 191 661</strong></td>
<td><strong>38 660 232</strong></td>
<td><strong>37 180 362</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Department of Finance
3.2.2 Trends in personnel and non-personnel costs

To look at the aggregate amounts in the education budget masks the reality of what is happening within provincial education departments. Personnel costs went up by 37% in the three year period from 1995/96 to 1997/98, whereas non-personnel expenditure increased by just 0.5%. The bulk of the growth in the education budget was consumed by personnel costs whereas there has been a real decline in non-personnel costs. Given that there are about 1 million more learners in schools now than in 1995, there has been a significant decline in non-personnel expenditure per learner.

Items such as water and electricity, school security, maintenance and repairs, equipment, stationery and textbooks have been reduced significantly in real terms. This trend continues in the 1998/99 budget with a further real decline in non-personnel expenditure. The reduction in these items of expenditure mean that basic service delivery becomes very difficult, if not impossible. Although there is no consensus on exactly ‘what works’ in education, it is clear that shortages in learner support materials, as a result of cuts in non-personnel expenditure, has negatively affected productivity in the classroom. The implementation of outcomes based education (OBE) requires a healthy balance between personnel and non-personnel inputs. Current education budgets make this balance difficult to achieve.

There are two broad reasons for the dramatic increase in personnel costs over the previous three years: more teachers and higher levels of pay. The pattern of increases in personnel costs is similar to that in total education expenditure: that is, there was a dramatic increase the 1996/97 fiscal year, while the increase in 1997/98 was consistent with normal budget increases. In 1996/97, personnel expenditure went up by 25% whereas the increase in
1997/98 was just 9%. The 9% increase can be attributed to annual salary agreements and a small degree of wage drift\(^2\). The reasons for the 25% increase in 1996/97 are more complex:

- The three-year salary agreement that came into effect in 1996/97 saw average salary increases of between 12% and 15%.
- The broad-banding agreement saw approximately 40% of teachers’ move into a higher salary bracket.
- Approximately 30 000 new teachers were appointed partly in response to the new teacher / pupil ratios (see Chapter 4).

Again, there are large provincial variations in personnel expenditures. The Northern Cape and the Northern Province saw their personnel costs go up by 42% and 48% respectively in 1996/97 whereas in 1997/98, their personnel costs went up by 6% and 12% respectively. At the other end of the spectrum, Gauteng and the Western Cape increased their personnel expenditure in 1996/97 by 15% and 20%, but in 1997/98, Gauteng was limited its increase to 7%, while the Western Cape was even able to reduce its personnel costs by 7%.

In summary, 1996/97 saw a large step increase in education expenditure. This once-off increase has been carried through in the education budget in subsequent years. There is still upward pressure, although more moderate than in 1996/97, on personnel costs in the education budget. This upward pressure arises from wage drift, additional promotion posts, improved teacher qualifications and new hiring.

3.2.3 Over-expenditure

The third issue that can be seen from the table is the divergence between budgets and actual expenditures. In 1996/97, actual expenditure was R6 billion or 21.6% higher than budgeted. In 1997/98, actual expenditure was again 20% higher that budgeted. Although the ICoS amounts, rollovers and the adjustments budgets are not included in the budgeted amounts (hence the actual percentage overspend is lower), the divergence still points to a serious problem. Some of this over-expenditure was absorbed by cuts to other provincial functions. Nevertheless, some provinces ran large deficits that were financed by a combination of reserves, bank overdrafts, borrowing or additional funding from national government.

Although the level and causes of over-expenditure differ from province to province, there are some general reasons for the over-expenditure:

- Poor budgeting: some provinces under-budgeted for education even though previous years expenditures gave an indication that the budgeted amounts were not sufficient.
- Unfunded mandates: national agreements and policies put pressure on provinces that were not adequately anticipated by national government at the time of the agreements and therefore not funded at the provincial level. The broad banding of salary scales in 1996/97 is such an example.
- Poor financial and managerial systems: some provinces lacked the capacity to manage their spending. Financial controls, provisioning systems and personnel systems were all inadequate and resulted in widespread corruption, inefficiency and wastage.

\(^2\)Wage drift is referred to as the increase in the wage bill due to improvements in qualifications, notch increases, etc.
The base problem: the base used to calculate the amount of money going to provinces in 1995/96 was too low. When the 1995/96 budget was pieced together from the former provincial and homeland budgets, provinces were not able to meet their expenditure responsibilities. The 1996/97 and 1997/98 budgets were merely extrapolated from the 1995/96 budget, which continued the shortfall in provincial revenue.

The picture is not all gloomy. Some provinces have been able to improve their budgeting systems, and their managerial and financial systems, to reduce their over-expenditure. The 1998/99 budget allocated an additional R2.8 billion to provinces, which shifted the vertical division in their favour. In addition, national government absorbed the debt that was being carried by provinces from the old homeland system.

3.3 Inter-provincial analysis

In this section the analysis is continued by examining data on the share of provincial budgets allocated to education, education spending per learner, learner educator ratios and educator costs.

3.3.1 Share of education in total expenditure

Provincial education expenditure increased from 38.7% to 40.1% of total provincial expenditure between 1995/96 and 1997/98. Table 2 shows the percentage that education expenditure consumed in relation to total expenditure per province.

In general, most provinces have either maintained or increased their expenditure on education. The MTEF guidelines request that provinces spend 85% of their budgets on the three social service functions; viz. education, health and welfare. With this guideline in mind, it is likely that education will stabilise at approximately 40% of provincial budgets in the future.

Table 3.2 Share of education in overall provincial budgets

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>33.8%</td>
<td>36.5%</td>
<td>42.5%</td>
<td>40.1%</td>
</tr>
<tr>
<td>Free State</td>
<td>37.0%</td>
<td>38.5%</td>
<td>36.4%</td>
<td>38.6%</td>
</tr>
<tr>
<td>Gauteng</td>
<td>40.9%</td>
<td>40.5%</td>
<td>40.0%</td>
<td>40.8%</td>
</tr>
<tr>
<td>Kwazulu-Natal</td>
<td>37.7%</td>
<td>37.5%</td>
<td>37.4%</td>
<td>37.6%</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>45.5%</td>
<td>44.4%</td>
<td>45.0%</td>
<td>42.1%</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>38.6%</td>
<td>39.8%</td>
<td>36.6%</td>
<td>37.3%</td>
</tr>
<tr>
<td>Northern Province</td>
<td>42.8%</td>
<td>48.6%</td>
<td>49.7%</td>
<td>50.5%</td>
</tr>
<tr>
<td>North West</td>
<td>38.3%</td>
<td>38.7%</td>
<td>42.0%</td>
<td>41.2%</td>
</tr>
<tr>
<td>Western Cape</td>
<td>39.4%</td>
<td>40.6%</td>
<td>36.0%</td>
<td>38.4%</td>
</tr>
<tr>
<td>National</td>
<td>38.7%</td>
<td>40.1%</td>
<td>40.7%</td>
<td>40.9%</td>
</tr>
</tbody>
</table>

* Improvements of conditions of service included (estimated for 1998/9)
Source: Dept. of Finance

3.3.2 Education spending per learner

Over the period under review, not only did the expenditure per learner increase substantially, the total enrollment also increased significantly. Learner enrolment increased from an estimated 11.7 million in 1995 to 12.7 million in 1998. Education expenditure per learner increased from R2 509 in 1995/96 to R3 044 in 1997/98 (a 21% increase compared to an inflation rate of 17% for the period). According to a survey done by the Department of
Education before the end of the 1997/98 fiscal year, provinces were projected to spend an average of R2 903 per learner (excluding ICoS) with the Western Cape spending R4 027 per learner and Kwazulu-Natal projected to spend R2 508. The demographic profile and structure of enrolment contribute to this divergence. Although the amounts eventually spent may differ slightly from these projections, they do give an accurate indication of the discrepancy in expenditures between the provinces.

Table 3.3 Projected per learner expenditure for 1997/98 in Rands

<table>
<thead>
<tr>
<th>Province</th>
<th>Administration</th>
<th>Public schools</th>
<th>Independent schools</th>
<th>Special schools</th>
<th>Teacher training</th>
<th>Technical colleges</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>174*</td>
<td>2 371</td>
<td>1 097</td>
<td>25 953</td>
<td>8 173</td>
<td>4 971</td>
<td>2 750</td>
</tr>
<tr>
<td>Free State</td>
<td>161</td>
<td>2 562</td>
<td>1 193</td>
<td>19 599</td>
<td>12 732</td>
<td>5 785</td>
<td>2 869</td>
</tr>
<tr>
<td>Gauteng</td>
<td>56</td>
<td>3 594</td>
<td>1 986</td>
<td>54 949</td>
<td>11 620</td>
<td>7 290</td>
<td>3 856</td>
</tr>
<tr>
<td>Kwazulu-Natal</td>
<td>104</td>
<td>2 276</td>
<td>1 633</td>
<td>17 859</td>
<td>13 304</td>
<td>7 004</td>
<td>2 508</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>62</td>
<td>2 462</td>
<td>2 637</td>
<td>16 700</td>
<td>10 052</td>
<td>7 546</td>
<td>2 654</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>132</td>
<td>3 712</td>
<td>952</td>
<td>24 606</td>
<td>18 582</td>
<td>9 576</td>
<td>4 043</td>
</tr>
<tr>
<td>Northern Province</td>
<td>239</td>
<td>2 133</td>
<td></td>
<td>38 335</td>
<td>11 715</td>
<td>7 737</td>
<td>2 532</td>
</tr>
<tr>
<td>North West</td>
<td>247</td>
<td>2 366</td>
<td>863</td>
<td>7 706</td>
<td>10 551</td>
<td>5 729</td>
<td>2 685</td>
</tr>
<tr>
<td>Western Cape</td>
<td>131</td>
<td>3 643</td>
<td>1 089</td>
<td>22 679</td>
<td>22 303</td>
<td>9 342</td>
<td>4 027</td>
</tr>
<tr>
<td>National average</td>
<td>174</td>
<td>2 472</td>
<td>1 533</td>
<td>24 619</td>
<td>11 841</td>
<td>7 072</td>
<td>2 903</td>
</tr>
</tbody>
</table>

* The national average administration figure is used, as the data provided for Eastern Cape combines administration and public schools.

Source: Dept. of Education 1997/98 expenditure review

3.3.3 Learner-educator ratios

Clearly the most important drivers of spending per learner are learner-educator ratios and the cost per educator. Table 3.4 illustrates the estimated learner-educator ratios per province for 1998.

Table 3.4 Learners per educator at the school level for 1998

<table>
<thead>
<tr>
<th>Province</th>
<th>Learner : Educator ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>35</td>
</tr>
<tr>
<td>Free State</td>
<td>33</td>
</tr>
<tr>
<td>Gauteng</td>
<td>31</td>
</tr>
<tr>
<td>Kwazulu-Natal</td>
<td>37</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>35</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>28</td>
</tr>
<tr>
<td>Northern Province</td>
<td>34</td>
</tr>
<tr>
<td>North West</td>
<td>32</td>
</tr>
<tr>
<td>Western Cape</td>
<td>33</td>
</tr>
<tr>
<td>National average</td>
<td>34</td>
</tr>
</tbody>
</table>

Source: Calculated from Dept. of Education data

The provincial variation is again substantial. The Western Cape and Northern Cape have low L:E ratios whereas in the Northern Province and Kwazulu-Natal they are high.

An L:E ratio is converted into an average class size by taking into account the average teacher load, the level of platooning, and the extent of teacher substitutions. It is also affected by may management decisions at school and district level. In Kwazulu-Natal the average class size is close to 45 whereas in Gauteng the figure is only 33.
Table 3.5  Per-learner budgets for personnel and non-personnel items in 1998/9

<table>
<thead>
<tr>
<th>Province</th>
<th>Number of learners (1998 Estimate)</th>
<th>Per-learner Budget for 1998/99 (Rands)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Personnel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>2,295,100</td>
<td>2,578</td>
</tr>
<tr>
<td>Free State</td>
<td>807,649</td>
<td>2,726</td>
</tr>
<tr>
<td>Gauteng</td>
<td>1,399,670</td>
<td>3,344</td>
</tr>
<tr>
<td>Kwazulu-Natal</td>
<td>2,812,306</td>
<td>2,225</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>923,808</td>
<td>2,490</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>202,305</td>
<td>3,628</td>
</tr>
<tr>
<td>Northern Province</td>
<td>2,043,454</td>
<td>2,780</td>
</tr>
<tr>
<td>North West</td>
<td>945,536</td>
<td>2,946</td>
</tr>
<tr>
<td>Western Cape</td>
<td>904,752</td>
<td>3,315</td>
</tr>
<tr>
<td>National</td>
<td>12,334,580</td>
<td>2,727</td>
</tr>
</tbody>
</table>

Calculated from Dept. of Education data

The funding formula gives provinces an equitable share, which is weighted towards poorer provinces. The education component of that formula is made up of an average of school enrolment figures and the number of school aged children in the province. The large variance in per learner funding occurs because some provinces have a much higher percentage of their population in school. For example, the Western Cape and the Northern Province have roughly the same total population. The Northern Province received a total allocation of R 11.3 billion for 1998/99 whereas the Western Cape received R9.7 billion. The Northern Province spent more than R 2 billion more than the Western Cape on education in 1997/98 and has budgeted to spend about R 2 billion more than the Western Cape in 1998/99. Tables 3 and 5 show that the Western Cape spends almost 50% more per learner than the Northern Province and has substantially smaller class sizes.

The reason for this is that while the Western Cape has about 970 000 learners, the Northern Province has 1.8 million learners in the school system. Poorer provinces tend to have a younger age profile, which means that they have a higher proportion of their population of school going age. In addition, past inefficiencies, high repeat rates, high numbers of under-aged and over-aged learners, and the lack of employment opportunities for young adults, all contribute to high enrolment rates. The result is a highly distorted system of education that is stretched to the limit, an not easily able to reduce the inefficiencies listed above. Even if the enrolment figures are slightly exaggerated (as issue that is raised later); the figures point to a serious problem in per learner expenditure.

A major theme of the 1997 Education sectoral report was the focus on repeat rates, over-enrolment and poor quality teaching. Unless out-of-age\(^3\) enrolment rates are decreased and pass rates increased in poorer provinces, we are still likely to have a distorted system with large class sizes and poor teaching quality. The most viable solution to this problem is to increase in teacher productivity through improved workload, better lesson planning and enhanced teacher support systems.

3.3.3 Educator costs

Educator costs are a function of educator qualifications, the agreed national salary structure, and decisions regarding promotions and notch increases. Provinces have very little discretion on the level of teacher pay, although they clearly do have some control over promotions and notch increases. Tighter controls on these instruments can yield savings at the margins, which can be used on non-personnel expenditure.

\(^3\) Out-of-age enrolment refers to both under-aged children, who are admitted to grade one, and over-aged children in higher grades.
### Table 3.6 Budgeted costs per CS educator for 1998/99

<table>
<thead>
<tr>
<th>Province</th>
<th>Expenditure on CS Educators</th>
<th>Number of CS Educators</th>
<th>Average teacher cost (Rands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape *</td>
<td>2 104 478</td>
<td>25 842</td>
<td>81 436</td>
</tr>
<tr>
<td>Free State</td>
<td>4 048 080</td>
<td>50 170</td>
<td>80 687</td>
</tr>
<tr>
<td>Gauteng</td>
<td>5 783 731</td>
<td>82 965</td>
<td>69 713</td>
</tr>
<tr>
<td>Kwazulu-Natal</td>
<td>2 692 807</td>
<td>26 319</td>
<td>79 517</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>694 984</td>
<td>7 251</td>
<td>95 847</td>
</tr>
<tr>
<td>Northern Province</td>
<td>2 729 385</td>
<td>34 263</td>
<td>79 660</td>
</tr>
<tr>
<td>North West</td>
<td>4 158 088</td>
<td>55 016</td>
<td>75 580</td>
</tr>
<tr>
<td>Western Cape</td>
<td>2 747 451</td>
<td>30 450</td>
<td>90 228</td>
</tr>
<tr>
<td>National</td>
<td>24 359 004</td>
<td>312 276</td>
<td>78 005</td>
</tr>
</tbody>
</table>

* Data for the Eastern Cape was not available at the time of publication.

Source: Dept. of Education

### 3.4 Credibility of the Education Budgets

#### 3.4.1 Defining credibility

For the purposes of this discussion, we define credibility as consisting of financial credibility and educational credibility.

Financial credibility is dependent upon the following criteria:

- The percentage change from the 1997/98 actual expenditure;
- The amount budgeted for personnel in relation to last year’s expenditure;
- The labour relations’ environment, which will influence the ability of provinces to manage their personnel costs;
- New policies that will affect provincial expenditure;
- The history of managerial capacity in the provinces; and the
- Cost-control measures in place to control expenditure.

Educational credibility is related to whether the provinces are able to deliver basic services assuming that they stay within their budgets. The criteria include:

- Whether provinces are able to put a teacher in front of every class;
- The impact of the cuts in non-personnel expenditure on service delivery;
- The ability to supply textbooks, learner support materials and cover costs such as water and electricity; and
- The costs and budgets for curriculum 2005.
### 3.4.2 Some comments on the 1998/99 budgets

The expenditure review team took the view that it should make a medium-term assessment of the credibility of provincial education budgets. Reference will be made to the 1998/99 budgets only for the purposes of developing a medium-term view.

#### Table 3.7 Change in provincial education spending 1997/8 to 1998/9 *

<table>
<thead>
<tr>
<th>Province</th>
<th>Personnel spending</th>
<th>Other spending</th>
<th>Overall change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>0.4%</td>
<td>-51.7%</td>
<td>-6.7%</td>
</tr>
<tr>
<td>Free State</td>
<td>-3.3%</td>
<td>-13.4%</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Gauteng</td>
<td>-2.2%</td>
<td>12.1%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Kwazulu-Natal</td>
<td>-3.0%</td>
<td>-23.8%</td>
<td>-5.0%</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>1.2%</td>
<td>12.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>-5.8%</td>
<td>6.6%</td>
<td>-4.2%</td>
</tr>
<tr>
<td>Northern Province</td>
<td>-2.6%</td>
<td>-11.2%</td>
<td>-3.4%</td>
</tr>
<tr>
<td>North West</td>
<td>-2.9%</td>
<td>-2.2%</td>
<td>-2.8%</td>
</tr>
<tr>
<td>Western Cape</td>
<td>-5.7%</td>
<td>-11.9%</td>
<td>-6.4%</td>
</tr>
<tr>
<td>National</td>
<td>-2.1%</td>
<td>-18.3%</td>
<td>-3.8%</td>
</tr>
</tbody>
</table>

* Calculated from 1997/8 total actuals and 1998/9 budgets excluding improvements of conditions of service. Changes in personnel spending may therefore be regarded as real (inflation adjusted). For other spending, however, inflation effects must still be added. Source: Dept. of Finance: derived from Table 3.1

The 1998/99 budget reflects a 3.8% nominal decrease in expenditure over the amount actually spent last year. A 2% decline in personnel expenditure and an 18% decline in non-personnel expenditure make this up. The Eastern Cape is expecting to decrease its overall education expenditure by 6.7% whereas Mpumalanga has budgeted for a 2% increase in education expenditure.

As a rule of thumb, a budget cut in excess of 5% in one year cannot be managed without an impact on service delivery and/or major restructuring including retrenchments. This rule of thumb must be looked at in the context of managerial capacity and labour market issues. The cost-controls put in place will almost certainly lead to a negative impact on service delivery in the short term. However, as managerial capacity and budgetary systems improve, the savings from better management would lead to more efficient service delivery at a higher standard. Managing this short-term impact in service delivery is crucial for the long-term success of expenditure controls.

Non-personnel expenditure has been cut in real terms by about 16% over the past three years and these cuts continue in the 1998/99 budget. As non-personnel expenditure at the school level is decreased, parents are made to share a bigger burden of the education expenditure. In certain instances, this will result in improved service delivery at a lower cost but in many instances, the ability to pay will influence the quality of service received. This places poorer households at a disadvantage. The implementation of the SA Schools Act and the Funding Norms and Standards requires more money to be spent on poorer schools. The pace at which this redistribution is implemented will influence service delivery to poorer schools in general.

The Presidential commitment that every child to have her or his learning materials and textbooks by the first school day does not appear likely to be achieved due to cuts in allocations for stationery, textbooks and materials over the last few years. Since the provision of textbooks is not a contractual obligation, most provinces have reduced their budgets for this item because of the need to budget adequately for contractual obligations such as salaries and service payments.
Some comments on particular provinces follow:

- The Eastern Cape has budgeted for a 6.7% decrease in its education expenditure, which comprises a 52% decline in non-personnel expenditure while personnel stays flat. Getting rid of even a small number of ghost teachers or duplicate earners will result in a more manageable personnel budget. Simple controls on hiring which seem to have worked in 1997 would ensure that the province does not overspend on its personnel costs.

  A 52% cut in non-personnel expenditure is very drastic. Even with effective management systems, provisioning systems and efficiency savings; ensuring effective service delivery will be difficult. From the amount of R 451 million, R 139 million needs to be paid for the completion of schools building projects not yet budgeted for. A further R 140 million is due to be paid for outstanding commitments from last year’s budget.

  Hence, the province can manage within their budget but this will have an impact on service delivery. The impact would be in terms of textbooks, equipment, stationery, water & electricity bills, fuel bills, school maintenance and communication. In the medium term, the province will have to manage down its personnel expenditure in order to provide basic services to schools and learners. The province would have to cut its personnel costs by R725 million or 12% in order to be able to spend 20% of its education budget on non-personnel costs.

- The Free State has budgeted for a 4.36% decrease in education expenditure. Personnel expenditure is projected to be slightly down whereas a 13.4% decline in non-personnel expenditure is budgeted for. Without the tools to reduce personnel expenditure, it is not clear how this decrease will be effected.

- Kwazulu-Natal has budgeted for an overall decrease of 5% on its 1997/98 actuals. Personnel expenditure declines by 3% and non-personnel expenditure by 23%. As a result of a reduction in personnel, the provincial education department is expected to have a small saving under personnel, which can be used to cover projected shortfalls in non-personnel expenditure. The cut in non-personnel expenditure has resulted in lower expenditure on services such as water, electricity, telephones and postage. In addition, limited funding only is available in respect of Curriculum 2005, cleaning services, security services and maintenance of buildings.

  The anticipated savings can be attributed to the fact that the contracts of 2637 temporary teachers were not renewed from 1 April 1998. Unless this saving can be made and transferred to non-personnel items, the province would not be able to deliver certain services to schools and learners.

- The Northern Cape has budgeted for a 4.21% decrease for the 1998/99 financial year. The increase of 6.64% in non-personnel is in order to address the backlog of textbooks, equipment and general services. This was due to a departmental moratorium on hiring placed during the 1997/98 financial year.

- The Western Cape budget was based on the assumption that personnel numbers would be reduced by 30 June 1998 through the offering of voluntary severance packages. The target of 1600 teachers and 14000 public servants taking the VSP were attained by this date and, while this places a strain on the budget, it is anticipated that the targets will be reached by the end of this calendar year.
Concern has been expressed at the possibility of large numbers of classrooms being left without a teacher as a result of the termination of the services of temporary teachers. An investigation into classes without teachers is being conducted under the auspices of Nedlac. The first provincial investigation conducted in KwaZulu-Natal concluded that only 14 classes were in this position. The Department of Education in the province had made a concerted effort to provide teachers in all such cases.

Further investigations in the Free State and other provinces will be undertaken in the near future.

3.4.3 Comments on the medium-term credibility of the budgets

During 1997/98, provincial education departments overspent by about R 6 billion. The Departments of State Expenditure (DSE), Finance and Education took measures to improve financial controls and improve budgeting. Reports from the DSE and initial reports from the FMS system in 5 of the 9 provinces indicate that the expenditure controls have made a positive impact on financial management. Although much still has to be done to improve financial and managerial capacity, the general situation is a substantial improvement from last year.

Good financial management is essential for ensuring efficiency improvements in the long term but the expenditure controls put in place will lead to cuts in basic service delivery in the short to medium term. To evaluate the credibility or sustainability of the medium term budgets, one has to evaluate the budgets within the context of the policy environment and the desired mission and goals of the education system as a whole.

Whether a province can continue to deliver quality services in the current climate of fiscal austerity is largely dependent on the managerial capacity of provincial education departments. Management capacity differs widely between provinces. The level of administrative expenditure per learner is not a good proxy for administrative capacity within a province. In general, provinces with larger numbers of skilled people, such as Gauteng and the Western Cape, have better management systems than poorer provinces that have a low skills base inherent in their province.

One area of management that requires the most urgent attention is financial management. Poorer provinces are not able to attract highly skilled individuals for a number of reasons. Firstly, the public sector in general has difficulty in attracting skilled professionals in the accounting, information systems and management fields, mainly due to uncompetitive salaries for professional staff. Secondly, the location of certain provincial capitals makes it difficult to attract skilled professionals, who prefer to work in the major urban centers.

The prospects for education spending do not look good. Personnel costs have grown faster than education expenditure for the past three years. Total education expenditure itself has grown in real terms, at a rate faster than public expenditure. The economy has not performed as well as was expected when the initial MTEF budgets were drawn up. Economic growth for the past two years has been slower than population growth, and hence slower than the growth of the school population. Assuming that education budgets grow moderately in real terms, as provided for in the MTEF budgets, we will still have a small real decline in per learner expenditure over the next three years.

An area of concern in the context of decreasing non-personnel expenditure has been the reduction in expenditure in capital infrastructure. Of most concern is the low level of capital expenditure in poorer provinces that, in terms of the schools register of needs, have huge backlogs in classroom provision, water provision to schools, electricity and toilets in schools. Provinces with the largest backlogs have also had to make the largest cuts in capital
expenditure due to pressure on their budgets, mainly from personnel costs. The current intergovernmental revenue sharing formula does not take sufficient account of capital backlogs that are inherent in provinces where homelands existed.

If present trends continue, delivery of basic education in a number of provinces will come under pressure. There are a number of variables that will affect likely outcomes. They are:

- Real economic growth over the next three years which would influence the size of total budgets;
- The equitable share formula that determines the level of funding to a province;
- The proportion of provincial budgets being spent on education;
- Salary agreements negotiated at a national level; and
- A redeployment and/or retrenchment tool to assist in rightsizing.

Although the variables above are important, the key issue of improving productivity in the classroom requires creative management and not necessarily more money. The following description of the funding variables assumes that improvements in learning are not possible in the short to medium term. Realistically, given the difficulty to improve teaching quality in the short term, the budgetary outlook looks pessimistic.

Let us examine the above variables realistically. The economic forecasts for the next year or two are not optimistic. The crisis in Asian markets and speculative attacks on the Rand have eroded optimism in the short-term performance of the South African economy. With high real interest rates and a loss in confidence in emerging markets, growth rate projections have been scaled down. Hence, budgets should be expected to be smaller than initially projected in the MTEF.

Current prospects are that wage increases will continue to at least match inflation. Unless there is a change of mindset in the education labour relations arena, it will be difficult to bring about a reduction in real salaries over the next three years. As teacher qualifications improve, wage drift will further increase the upward pressure on the wage bill.

The equitable share formula used to distribute funds to the provinces is a variable that can be adjusted to give poorer provinces more resources, some of which can then be spent on education. The formula is already redistributive in nature but can be changed to provide marginally more money to poorer provinces. This will take time to feed through the system due to the multi-year budgeting system and phasing nature of the formula. It will only make a difference at the margin. It must be noted that such a change will simply shift the burden of overspending among provinces.

Provinces currently spend about 40% of their entire budgets on education. The N. Province spends almost 50% of its budget on education. Provinces with academic health complexes spend a slightly lower proportion on education but, as a percentage of their unconditional allocation⁴, they spend roughly the same as the rest of the provinces. Advocating an increase in the proportion spent on education would require an argument for reducing expenditure in other provincial departments. This is possible at the margins and should be explored in detail by provinces but is not likely to yield substantial increases.

⁴ Academic health care facilities are partially funded by conditional grants specifically for this purpose.
The current moratorium on retrenchment is likely to be lifted but two factors militate against large-scale retrenchment. The first is that retrenchment is very expensive. The current retrenchment tool costs in excess of one year’s salary and is therefore unaffordable given the current pressure on provincial education budgets. The second reason is that the political environment is not conducive to retrenchments or a confrontation with labour so soon before an election.

As can be seen, adjusting any of the five variables listed will be very difficult but in the absence of change, we will have education budgets that will not be able to deliver basic services in some if not most provinces. Tough choices will have to be made in order to realise a set of credible budgets for the medium term; a set of budgets from which provinces will be able to deliver basic education.

This document will present some of the options open to government for ensuring that service delivery is possible in the medium term. Whatever option is chosen, it will require stakeholders within the education sector to pull in the same direction, a coherent set of policies and programmes and a realistic timeframe for achieving them.

3.5 Data Problems

There is a need for considerable caution in any analysis of education expenditure over time. Early data sets are poor: even simple data such as actual expenditures for 1995/96 or 1996/97 are difficult to obtain. At this point, not all provinces have the same financial systems, with only six provinces on FMS. Persal data from 1995 and 1996 are almost non-existent for certain provinces. The EMIS system is constantly improving, but there are still large inconsistencies in data from 1995 to 1997. Due to improvements in financial management and data collection, we are beginning to piece together a picture of the education system that previously did not exist. This is positive and these endeavors must be continued.

However, due to past inconsistencies in the data, we are not able to present an accurate picture of how the education system has changed over the past four years. We do not know exactly how many teachers have been employed over the past four years, nor do we have accurate data on learner enrolment for the period. The lack of a time series for key educational data makes analysis and policy development a very difficult exercise.

Due to improvements in the Persal system, we are now able accurately to estimate the number of teachers we employ on a monthly basis. The problem of ghost teachers will be raised later in this report. A comprehensive audit has been conducted in some provinces, but there is still work to be done in other provinces in order to weed out ghost teachers.

The intergovernmental equitable share formula, new funding procedures for public and independent schools as well as teacher provisioning are all determined using school enrolment data. School enrolment data is received by the EMIS system from provinces, that in turn get this data from districts, which get it from schools themselves. A data reliability problem exists where schools, districts and provinces all stand to benefit from inflated enrolment data. No comprehensive audit or even sample survey has been done to verify enrolment data. The census will give us a good indication of how many children are in school. The Department of Education should conduct an audit of provincial enrolment figures since enrolment data is so central to the funding of education.
3.6 Conclusion

The analysis of the data available indicate the following conclusions:

- Provincial education expenditure increased by 14% in real terms from 1995/96 and 1997/98;
- Personnel expenditure increased by 20% in real terms;
- Non-personnel expenditure declined by 17%;
- The main increases in personnel occurred in 1996/97.
- There is still an upward trend in personnel expenditure due to wage drift.
- This upward trend in personnel expenditure will result in major difficulties in the medium term.
- Data problems, especially from 1995/96 to 1997/98 make analysis very difficult.
Chapter 4: Personnel

4.1 Inefficiency problems

The problems of inefficiency in the education sector, particularly the “ordinary schools” sub-sector are fairly well-known, and were the subject of much of the previous MTEF sectoral work. Here we only summarise the problems briefly, because it is important to recall these issues. The considerable amounts of spending and labour effort devoted to education, when compared to the results obtained, are a more serious problem than the level of spending per se.

As noted in last year’s education MTEF work, there are various “sources” or “areas” of inefficiency in the sector, some of which have to do with sub-optimal use of resources, and some of which have to do with resource pricing:

- Flow-through of learners is low: it takes some 35 pupil-years of effort to produce one matric pass, whereas a more reasonable goal for a country such as South Africa might be about 25. Thus, while youth are spending, on average, some 12-13 years in schools, only about 1/3 of each cohort of young adults achieves a matric pass. Insufficient learning over a given amount of time, due partly to insufficient time-on-task, is a key problem, and is related to educator productivity and work effort.

- There is a dilemma in educator costs, since these costs are high relative to the tax-base of the country (i.e. average personal income), but not so high relative to the cost of other professionals with similar qualifications. The only solution would appear to be to increase productivity in the classroom.

- From a pay point of view, teaching is attractive to younger, less qualified people whereas the profession is not attractive enough for older, more qualified teachers. This characteristic of the salary structure results in an inability to keep teachers who are highly qualified and helps explain the relatively high attrition rate of the system.

- Work effort and educator and learner attendance would appear to be low, though it is difficult to obtain accurate and objective measures of this. Judging by the relatively simplistic yardstick of the excess of educators over classroom space, it would appear that in some provinces only some 70% to 80% of educator time can be properly utilised, yet even in these provinces the emphasis of equity policy was to add more educators. Platooning or double-shifting is relatively under-utilised, even as an emergency measure when there is a large excess of educators over classrooms. Anecdotal evidence, which must be heeded because it is pervasive and influences policy-maker opinion, also suggests a low level of work effort and time-on-task in many schools.

- Certain inputs (e.g., resourcing schools with media centres or libraries, the provision of learner and educator support materials and textbooks) appear to have a very high marginal productivity relative to cost (can substantially increase learning at a relatively low cost) at the moment. Yet their distribution is extremely unequal, and their utilisation is crowded out by personnel costs.

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5 Time-on-task refers to the actual time that is spent teaching or supervising learners.
4.2 Key policy initiatives on personnel: 1994-1998

We have seen above that personnel costs are indeed problematic for the sector, though the problems are not necessarily what they seem. While, as pointed out in chapter 3, there may not be an explosive trend in personnel costs that threaten large overall deficits in provincial spending, the past “event” (the more-or-less once-off increase in 1996/97 over previous years) plus, on top of it, an ongoing but gentler trend in personnel cost increases does threaten the budgetary logic of educational provision itself. The consequences of the ‘event’ and the ongoing trend now have to be dealt with.

Furthermore, we have noted that there are serious efficiency problems in the sector. Since personnel are the main input into the education production process, inefficiencies in the sector are largely related to inefficiencies in the organisation of, or low productivity from, this main input.

This, and the following two sections thus concentrate on developing an understanding of the policies and management factors that led to the existing problems (or have unfortunately failed to address them properly), and then propose some possible solutions for consideration.

4.2.1 Post provisioning norms

Background

One of the factors associated with the increase in personnel cost was the development of national norms for the provision of educators to schools. It is important to understand how and why these were developed and were implemented.

The initial norms for personnel provision were established at a time when the national Minister of Education had much more responsibility for the education budget, and was able to influence the division of funds allocated to provinces in accordance with such norms. Even though top-slicing took place (in pursuit of equity), the Minister was obliged to ensure that the funds were sufficient to cover the norms.

The norms of an educator learner ratio of 1:35 at secondary school level and 1:40 at primary school level were deemed to be educationally accountable and affordable, and, perhaps most importantly, provided for the continued employment of all educators believed at that stage to be in the system. In that sense it was appropriately described as a right-sizing exercise, involving a redistribution of human resources and not a change to the overall number of educators, estimated at the time to be about 360 000.

These norms were calculated on the basis of affordability, and included projections of growth in the number of learners, as well as a certain level of expected economic growth (which turns out to have been optimistic). The norms were meant as targets for the year 2000, with a five-year phasing in period. The implementation was another matter.

Each province was required to determine, in consultation with educator unions in the province, the rate at which these norms would be phased in. The outcome of these consultations was to be brought to the central Bargaining Committee of the ELRC for an agreement. The proposals from provinces should have been costed and mandated by provincial treasuries prior to being floated up to central level. This step was to ensure that no “unfunded mandates” were reached at the central level. Regrettably, not all provinces followed this procedure with the result that proposals from provincial representatives to the
ELRC had unclear or insecure funding bases. The Department of Education also faced a situation where no agreement could be reached in regard to the phasing in of norms for one province, with the result that no redeployment could occur during that year. Another factor was that many educators were not on the PERSAL system at the time of initial calculation, so projections of need and affordability were compromised. The promise of right-sizing was premised on the number of 360 000 educators, and this became problematic as it became clearer that there were closer to 400 000 in the system.

In addition, within provinces, schools which were disadvantaged by the previous dispensation were allowed to move directly to the applicable phasing-in norms, whereas advantaged schools were expected to move to the norm over a period of five years. The net effect was a rapid growth in numbers as educators were employed (on a temporary basis) to fill the new posts in disadvantaged schools, pending the redeployment of excess educators from advantaged schools. Because this redeployment was not immediate (see below), levels of employment (of temporary educators) increased dramatically. This became known as "double parking", with two educators employed in a single post, one serving at a particular school, where the post was to be abolished before 2000, while the new post had already been filled at another school. In provinces where redeployment was necessary this was probably the major factor behind the 1996/1997 growth in numbers.

In other provinces growth in numbers was due to the perception that, due to the 35 and 40 agreements, very large numbers of teachers could be employed, without a tight control of whether the numbers were affordable, and with some possible overshooting of the targets.

Recent past

The continued clash between collective labour agreements and provincial Treasury responsibilities soon became apparent after education budget competencies became fully a provincial matter. Essentially the same decision (about the use of resources) was being taken in two places; a national bargaining forum, and in provincial governments.

The situation was clearly a problem, and in order to reconcile the two processes, the State as employer attempted to negotiate a new deal that did not make use of nationally determined norms for educator provisioning. This was introduced in December 1997, but by late March 1998 no agreement had yet been concluded. In terms of the ELRC Constitution the Minister chose to act unilaterally on the matter, and published regulations which provided that the number of educators employed would be entirely contingent upon the budget of the province.

The settlement

It now been agreed by the Minister and educator unions that there is a need for some form of national regulation on educator provisioning, expressed as educator-learner ratios, and that these may take the form of a range, a ceiling or a target. The critical new dimension is that these national guidelines will take the form of policy determined by the Minister, and will not be obligatory norms. The Minister is obliged in terms of the National Education Policy Act (NEPA, 1996) to consult with all relevant stakeholders, and he has committed his Ministry to "attempt to reach agreement" on the policy before it is published as such. This is a procedural obligation, and does not give the unions a veto power as before.

The policy on educator provisioning that is determined would have to be affordable, and a joint investigation with the unions is currently underway to identify an acceptable and affordable level of staffing. But it should also be appreciated that a policy is qualitatively different from a labour agreement. Policies are in general binding on provinces (in terms of
the NEPA), but the interpretation and implementation of policy is a matter of provincial responsibility. This policy should be determined before the end of August 1998.

Once policy on educator provisioning norms for each province has been declared, individual schools will not be staffed according to a mechanistic educator-learner ratio. The norm is applicable to the province as a whole, but it is proposed that schools will qualify for personnel on the basis of a formula that takes account of the curriculum offerings of a school. The model allows for resources to be directed according to policy imperatives, and is flexible to allow for certain sectors or subjects to be privileged. Although not yet fully agreed to, the model provides a school, which offers specialist subjects (especially practical subjects and technical areas requiring workshop-type tuition), a more favourable staff provision than a school offering more general subjects. It also enables schools to be compensated for learners with special needs. The intended effect of this model will be to encourage schools to offer more technical, practical and scientific subjects, and to attract more learners into these shortage fields.

This model also has the potential to clarify a major confusion that occurred under the previous norms - namely that every school was entitled to the norm. Although the norms were intended as provincial averages, there was no objective mechanism to allocate personnel to schools besides this norm, and schools claimed their right to be staffed according to the norm.

A redress factor has been built into the latest proposals on post-provisioning, largely through the preservation of a fixed percentage of posts in each province which will be unallocated and made available to the Head of Department for deployment according to need, irrespective of the formula allocation.

4.2.2 Redeployment

Background

In the light of the calculations done on norms, and the reasonable belief that aggregates were not the problem at least in some provinces or overall nationally, the prime instrument for achieving equity was that of redeployment. Educators should be redistributed from areas of relative surplus to areas of need. Those who chose not to be redeployed, or wished to exit for other reasons, could take a voluntary severance package (VSP). The only conditions attached for approval were that the VSP would promote redeployment, and in so doing would advance representivity among school staff. There was no obligation to abolish the post vacated by granting a VSP.

Redeployment has not been as effective as was anticipated. A large problem has been the difficulties encountered in moving people – especially from advantaged to disadvantaged provinces, but even between schools within a province. Educators are a relatively stable and community-bound cohort, and it is difficult to argue that working conditions are the same at the schools that would be downsizing and those that would be taking on staff. In that case, dismissing staff for refusal to move was a difficult proposition. To complicate matters, the moratorium on employer initiated-retrenchments prevented an “ideal solution” for those who refused redeployment (even where the offer was apparently reasonable), and as a result there are many educators determined in excess at particular schools, but not able to be redeployed. At this stage these educators are kept on the establishment of the school until suitably redeployed.

Further complications arose as a result of the legal challenge to the Resolution 3 of 1996, which established the redeployment procedure, including a provision to secure the tenure of serving personnel. A group of school governing bodies successfully challenged the
agreement (the "Grove primary" case), arguing that it infringed their right to recommend the appointment of any suitably qualified person, and that they could not be restricted to a particular group of educators who were currently serving at other schools but were in excess at those schools. This held up redeployment for nearly a year, except by mutual agreement, and the matter was only resolved by the passage of the Education Laws Amendment Act (ELAA, 1997), which empowered the Minister to determine the "requirements for appointment". In terms of this power he has determined that for appointment to level 1 posts, applicants should be serving, excess educators, and for appointments to level 2 and above, serving educators. These requirements will likely only apply as long as there is a rationalisation process in pursuit of equity.

The present

In terms of the agreement reached with teaching unions, a new set of procedures for the rationalisation of education is to be developed. "Rationalisation" is taken to include various mechanisms which will enable the pursuit of equitable educator provisioning, including redeployment (the preferred option), an employee initiated termination (the VSP), and an employer initiated discharge (retrenchment, due to operational reasons).

These measures are near completion, and will become operative before teachers are allocated to schools for the new school year. These new instruments do not specify a retrenchment option, although a process for its inclusion is provided for. Such an instrument would most likely be a public service-wide provision, and not limited to education.

Most significant is the strengthened role of government in the process; school staff, parents and other interested parties are not able to stall or subvert the new procedures as was done before. The district manager, together with school principals in the district, determines which educators are in excess, taking into account the needs of the school curriculum, and applying the principle of "last in, first out". The procedures also take a much stronger line against those who are unwilling to move: redeployment is compulsory, and educators who unreasonably refuse will be deemed to have resigned, with no enhanced benefits or special termination package. This does not apply to those whose redeployment is administratively impossible (e.g., skills are not required elsewhere), and they will have to be held additional to the establishment of a school until a suitable offer can be made.

4.2.3 Collective bargaining on remuneration

Education is linked to the central salary scale for public servants, but there was some discretion in translating personnel from the old to the new system. The sector has devised a set of Relative Education Qualification Values (REQV), which provided the basis for the translation from a set of qualification-linked salaries to a broad-banding arrangement. In this, a classroom educator can rise in salary to the level of a school principal, relatively irrespective of qualifications. Ceilings do exist, but these are stretched over a group of salary ranges. Pedagogically this had the potential benefit to retain good educators in the classroom instead of forcing them onto a school-management path, and the rank of senior educator was proposed to accommodate this effect.

However the system has not had the desired effect because of the absence of an instrument to provide for salary progression. As a result, educators have stayed where they were when "translated", except for cost-of-living increases, and relative positions have remained unchanged.

The obvious solution is to introduce an instrument for performance measurement. In education, the technical problems and incentive effects (e.g., individual performance rewards based on assessments of children’s exam performances can encourage teachers to try to
pass problem children, instead of solving the problem) of these sorts of measures are a highly contested matter, and it is very difficult to apply them fairly in a differentiated context. The bureaucratic application of such measures can create more divisiveness in schools already often over-burdened with the challenges of transformation.

Progress is however being made with an agreement for a system of educator appraisal for development purposes, which may be the first step towards a salary progression system based on performance. It is also the case that it is difficult, in education, to create performance-based rewards (or, indeed, sanctions) that have any objective basis other than cognitive development in the children, yet South Africa lacks any method to objectively assess this factor, since the current examination system was not designed as a quality-control tool.

If one uses “process” indicators as a more or less “objective” basis for performance-based rewards, one runs the risk of encouraging a ritualistic pursuit of indicators whose causal relation to actual learning is not always clear. Other creative options, such as some type of group rewards (the international literature suggests that group-based performance pay should be considered when, as is the case in schools, it is not individual but institutional effort that “produces” learning in youth) could be considered. Nevertheless, even such an option tends to require the existence of a better exam system than the country currently possesses.

Collective bargaining mandates on most matters have resided with the Minister of Education, with the concurrence of the Minister of Finance on finance matters. The latter has exercised his authority through a Cabinet “Mandates Committee”, which has approved all finance-related negotiating positions advanced in collective bargaining in the Education Labour Relations Council (ELRC). Education policy matters, like the educator appraisal instrument, are the mandating responsibility of the Minister of Education.

With the establishment of the Public Service Coordinating Bargaining Council (PSCBC), transverse issues have been removed from the ELRC. Salaries and benefits are negotiated in the PSCBC, although some discretion may reside in the sectors as this new system unfolds. Central to this issue is the question of a wage policy, and the question as to whether in such a public service wide-policy, there might be a different emphasis in education (and perhaps other professional departments) from the rest of the public sector. This form of differentiation raises the further possibility of pay differentiation within the sector – between primary and secondary educators, for example, or according to region or subject taught. These are some examples that suggest a level of sectoral bargaining on salaries should be considered.

In the present structure of salary bargaining, there is no role for provincial education authorities. Provinces are represented, but are not always sufficiently informed about sector-specific matters. Because funds are voted centrally for the nine-month period following an agreement (July to March), this seems appropriate. Problems however arise the following year when provincial budgets face the effects of increased personnel costs. In anticipation of increased decentralisation of collective bargaining (at least to sector level), the education sector needs to collectively develop a sustainable remuneration policy for the applicable MTEF period. This will be even more critical, and contain a real pedagogic component, if salary improvement funds are combined in normal Departmental votes.
4.2.4 Managerial tools to enhance educator productivity

Three related management tools have been introduced to the ELRC. These include:

- An instrument for educator appraisal
- Job descriptions (in terms of which educators will be appraised), and
- A proposal on workloads.

**Educator appraisal**

An agreement has been reached with educator unions to implement appraisal for development purposes as from 1999, and to commence training for this immediately. The purpose of this appraisal will be twofold:

- To assist the individual educator to identify strengths and weaknesses, and hence to improve, and
- To assist the department of education in the targeting of development programmes.

This agreement is the outcome of a process which commenced in 1991, when SADTU and the (then DET) attempted to develop a strategy which would end the “No to Inspections” defiance campaign of the time. The political sensitivities of the matter, coupled with an inherently complex task of assessing the work of a professional, made for a lengthy process of consultation and development. The advantage is that the concept is now well grounded in all constituencies, and most provinces have set up the necessary infrastructure to manage the process.

Although there will be no direct career or pay related consequence of the appraisal outcome, appraisal reports are likely to gain currency through indirect means. School governing bodies and departments may choose to use these reports to inform future transfer and promotion decisions, and in this way to raise their status. It is certainly a step towards a greater managerial and public accountability for educators, managers, and even office-based educators, all of whom will be subject to appraisal.

This appraisal must be distinguished from the work of the South African Council for Educators (SACE), which is a professional registration body. SACE will maintain a Code of Conduct, and has legal powers to act against educators who transgress the Code. Although the Code supports a professional approach, it is not intended as an instrument to deal with misconduct, which is an issue between the employer and employee, and not a case for the profession.

**Job descriptions**

Job descriptions are a necessary pre-requisite to appraisal, and are being consulted on in the ELRC. They contain the normal requirements for an educator or departmental official, and are an attempt to institutionalise best practice at each level of the system.
Workloads

The workloads proposal is an attempt to bring educators in line with the normal public service requirement of 1 800 hours per annum. Because of a different pattern of work in education, this is proposed to comprise:

- 7 hours per teaching day x 200 days per year (on average) = 1 400 hours
- 1.6 hours per day outside school hours, for marking and preparation = 320 hours
- INSET (two weeks continuous or 2 hours per week) = 80 hours
- Annual total = 1 800 hours

Agreement has not yet been reached on this workload proposal, but it will be a major target of the Department of Education to get agreement on these management tools, and see to their effective implementation during the course of next year. Productivity gains should be achieved.

4.2.5 COLTS Campaign and educator personnel management

The COLTS (Culture of Learning, Teaching, and Service) Campaign has been operational for approximately two years now, although the first few months were largely preparatory. The aims of the campaign are, amongst others, to provide the community-based underpinnings needed to improve some of the “basics” such as educator and learner attendance and punctuality. The COLTS Campaign was the first more or less official recognition of the fact that efficiency and work effort problems, rather than funding by itself, were at the heart of problems in the education sector.

Since then, the routine management of the system has come to recognise the centrality of these concerns. Therefore, there has been a tendency to question whether the aims of the Campaign should not simply be carried out through the “normal” managerial means. It is often advocated that all that is needed is increased managerial proficiency to deal with the problems, as well as the “political backing” and “political will” needed to be able to enforce the managerial prerogative. This, in turn, is posited to require high-level agreements with labour organisations and political office-bearers. While it is true that enhancing the “normal” managerial capacity to address these problems, and developing the necessary political backing, is indeed important, it may not be enough.

Thus, unless ground-level work is done to improve relations at school level, the purely managerial and high-level political efforts will tend to be insufficient. What might be needed at the local level is a type of mobilisation and a putting into place of accountability practices and social contracts. This cannot happen immediately, and will not happen by itself. It must be coordinated and supported. Thus, an intensification of efforts such as the COLTS Campaign may well be needed. However, such intensification must be based on the notions of accountability and social contracts, and must link to the managerial efforts under way. Such mobilisation cannot rely largely on good will and verbal agreements, but must work with the management of the provincial departments to develop and apply actual accountability and social contract practices oriented at improving the basics of discipline and performance.
4.3 Key personnel policy options

4.3.1 Numerical aspects

As is evident from the discussion in the section above, a key problem in the past has been the inability to cost out policy proposals on a more solid basis.

In an attempt to improve on this, and to underpin current discussions with educator organisations, a model has been developed to calculate the projected school level educator needs and costs to 2005 under different policy scenarios. The model serves to indicate education policy options that affect educator needs and costs in the medium term and which may be educationally and financially viable. The model was developed in national and provincial versions, but the data contained in the provincial versions will require further work and vetting by provincial education departments before their results can be used in policy deliberations.

Main findings

National projections indicate the following:

- With no changes in the system, even pretending no shifts in Relative Education Qualification Values (REQV) and post composition, and with a 0% real budget growth rate, the budget deficit in the public ordinary school (POS) educators’ share of spending will increase to R3.89 billion or 15% of the expenditure on POS educators by the year 2005.

- A 1% annual education budget increase would reduce this deficit to R2.29 billion or 8% of the expenditure on POS educators.

- These deficits presuppose that 91% of all education budgets continue to be spent on personnel. If this were reduced to 85%, the POS deficit would constitute 25% of the POS expenditure. In other words, it is impossible to shift the budget composition away from personnel even under these optimistic assumptions. If we assume that the REQV improves, that more promotion posts are created, then even increasing the L:E ratio by, say, 3, does not help.

- A small real decline in the cost of educators and real growth of the provincial education budgets phased in over a five-year period would assist in improving the budgetary outlook.

To assist in understanding the main trade-offs involved, the following table of approximate equivalencies is provided. All of the following have the same effect, namely costing R 3 billion per year more by whatever year they are finally implemented:

- improving the percentage of educators with M+3 from 62% to 90% at primary level and from 86% to 100% at secondary level
- lowering the L:E ratio by 3.5, or from, say, 34 to 29.5
- creating 15% more promotion posts
- increasing the budget at 2% per year in real terms vs. 0%

In other words, if R3 billion of “purchasing power” been made possible by, say, a budget increasing at 2% per year, one could take on one of the above three options or a modest combination of all three, but not all three at the levels shown.
Lowering the L:E ratio by 3.5 costs about R 3 billion. Similarly, increasing it by 3.5 saves R 3 billion. The same effect on class size can be achieved by increasing the percentage of periods worked by 5% and lowering the substitute usage rate (and devoting the freed-up funds to regular posts) by 4%.

No reasonable level of learner flow efficiency improvements would offset these costs. A 10% improvement in pass rates would have a short run impact of lowering the cost by only about R 1 billion, which cannot make up for the cost of lowering the L:E ratio, or improving the REQVs to the degree mentioned above. A 30% improvement is unreasonable in any realistic time span.

To conclude: if the REQVs are to be improved, and roughly the current differences in payment between REQV levels is maintained, then only the following set of policies can come close to balancing the budget and keep class sizes down to a reasonable level (about 41):

- increase the L:E ratio by about 3
- no more promotion posts
- lower substitute usage by 2%
- increase the total education spending by 2% per year
- increase period load by 5%

### 4.3.2 Details of costing simulations

Projected educator needs at public ordinary schools (POS) are based on learner projections, current learner educator ratios, teaching loads, class sizes, REQV composition and post level composition. The projected educator costs are calculated from the average educator salary per REQV. These are then compared to current expenditure on public ordinary school educators and the budget shortfalls (or excesses) are then indicated.

The projections allow for a number of policy options to be explored in addressing the cost projections. These are:

**Enrolment flow efficiency gains.** The last four years of learner enrolments show an overall decline in learners in the primary phase, particularly in grade 1. Even if there are no concerted efforts to ensure efficiency gains, this trend is likely to continue. However, the model offers the option of including strong efficiency gains especially in decreasing the intake of underage learners into grade 1 and decreasing the current levels of repetition. This would be consistent with the application of the current admission and age-grade policy.

**Wage growth scenarios.** While the model has the option of increasing the wage growth, for the purposes of this exercise wage growth was assumed to be 0% in real terms.

**Budget growth scenarios.** While the model can be switched to a budget growth scenario of 2% per annum, real budget growth of 0% per annum is assumed throughout.

**Increasing the learner educator ratio.** The current national school level learner educator ratio is 34:1. The model offers the option of increasing this incrementally to 37 over a five year period. As will be seen in Scenario C, this implies a class size of 41 if increases in workload and decreases in substitutes are implemented.

**Decreasing the substitute rate.** In the model, decreasing the percentage of substitutes is not calculated into cost savings that would accrue to treasury but instead remain within the education sector and translate into an overall reduction in class sizes.
Increasing the period load. The average period load is increased as follows in the model to affect smaller class sizes without increasing costs.

Table 4.1 Average period load: current and targets for 2003

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educator (Post Level 1)</td>
<td>0.936</td>
<td>0.98</td>
</tr>
<tr>
<td>HoD (Post Level 2)</td>
<td>0.907</td>
<td>0.95</td>
</tr>
<tr>
<td>Deputy Principal (Post Level 3)</td>
<td>0.860</td>
<td>0.9</td>
</tr>
<tr>
<td>Principal (Post Level 4)</td>
<td>0.096</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educator (Post Level 1)</td>
<td>0.85</td>
<td>0.9</td>
</tr>
<tr>
<td>HoD (Post Level 2)</td>
<td>0.8</td>
<td>0.85</td>
</tr>
<tr>
<td>Deputy Principal (Post Level 3)</td>
<td>0.57</td>
<td>0.6</td>
</tr>
<tr>
<td>Principal (Post Level 4)</td>
<td>0.043</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Decreasing the budget share on personnel. The current national budget share on personnel costs is 91%. This is reduced to 85% in Scenarios D and E.

Changing the post level composition to allow for more posts at level 2 (head of department), 3 (deputy principal) and 4 (principal). The current post level distributions are not altered for the purposes of this exercise.

Imprivements in the REQV levels of unqualified and underqualified educators. These are assumed to improve and as will be seen, constitute a significant increase in the average cost of educators.

Natural attrition of educators. This is assumed, conservatively, to be 2.5% per year.

4.3.3 Five potential policy options

The following five scenarios are projections for national educator needs and costs. Provincial variation has significantly different implications and three provinces are taken as samples.

a) With no specific policy changes

The table below shows that without any specific policy changes the projected budget over-expenditure on public ordinary educators in 1999/2000 will be R1.34 billion - which is 5% of the annual budget for public ordinary school educators. By the year 2005 this will be R3.89 billion or 15% of the budget for public ordinary school educators.

Over this time-period there is an initial growth in learner numbers of 3% until 2001 after which the learner growth rate begins to tail off and becomes negative.

The key cost factor in this no change scenario is the overall increase in educators needed in the system by 2005 – especially at the secondary level.
Table 4.2  Option A: no policy changes

<table>
<thead>
<tr>
<th></th>
<th>Actual 1999</th>
<th>Percent 1999</th>
<th>Actual 2005</th>
<th>Percent 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Budget overshoot in POS educator cost (R b)</strong> *</td>
<td>-1.34</td>
<td>-5%</td>
<td>-3.89</td>
<td>-15%</td>
</tr>
<tr>
<td></td>
<td>1999 2005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Class size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>38</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>37</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>38</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>L:E ratio</strong></td>
<td>34</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Change in total POS educators needed by 2003:</strong></td>
<td>37 105</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Yearly change:</strong></td>
<td>7 421</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Natural attrition per year</strong></td>
<td>9 781</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The deficit is only on the public ordinary school (POS) educators’ share of the budget.

b) With necessary and minimal policy options

The following policy options were factored into the national model:

- Improve pass rates, hence flow through, of 3% a year;
- Decrease in substitutes from 4% to 2% (this does not have a financial impact but effects a decrease in the class size);
- Increase in the period load as outlined above; and
- Upward movement in REQV levels.

As can be seen in the table below, the budget overshoot by the year 2005 is marginally lower than the no change scenario above at R3.49 billion or 13% of the budget. The efficiency gains from improved learner throughput and increased educator workloads are almost overshadowed by the more rapid improvements in educator qualifications/REQV.

Table 4.3  Option B: minimal policy changes

<table>
<thead>
<tr>
<th></th>
<th>Actual 1999</th>
<th>Percent 1999</th>
<th>Actual 2005</th>
<th>Percent 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Budget deficit in POS educator cost (R b)</strong> *</td>
<td>-1.38</td>
<td>-5%</td>
<td>-3.49</td>
<td>-13%</td>
</tr>
<tr>
<td></td>
<td>1999 2005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Class size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>38</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>36</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>37</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>L:E ratio</strong></td>
<td>34</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Change in total POS educators needed by 2003:</strong></td>
<td>26 385</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Yearly change:</strong></td>
<td>5 277</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Natural attrition per year</strong></td>
<td>9 664</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The deficit is only on the public ordinary school (POS) educators’ share of the budget.
c) With increased learner : educator ratio

An increase in the national average learner educator ratio from 34:1 to 37:1 in addition to the policy options above, decreases the total number of educators needed by 2251 per year and reduces the budget overshoot to 3% in 2005. This option still leaves personnel expenditure at 91% of total expenditure.

Table 4.4  Option C: increased learner: educator ratio

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th>Percent</th>
<th>Actual</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget deficit in POS educator cost (R bill).*</td>
<td>-0.81</td>
<td>-3%</td>
<td>-0.66</td>
<td>-3%</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class size</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>39</td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>37</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>38</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L:E ratio</td>
<td>34</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in total POS educators needed by 2003:</td>
<td>-11 257</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yearly change:</td>
<td>-2 251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural attrition per year</td>
<td>9 084</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The deficit is only on the public ordinary school (POS) educators' share of the budget.

d) With personnel share of the budget reduced to 85%

The above policy options are retained and the percentage share of the budget for personnel is reduced from the current 91% to 85%. If the overall budget growth remains at 0% per annum, this increases the POS budget overshoot to R2.82 bill (12%) by the year 2005. In other words, with a trend to improved REQV levels, then even an increase in L:E ratio, with a compensating increase in work effort and less substitutes, it is still impossible to shift the budget towards non-personnel items.

Table 4.5  Option D: personnel share reduced to 85%

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th>Percent</th>
<th>Actual</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget deficit in POS educator cost (R b).*</td>
<td>-1.25</td>
<td>-5%</td>
<td>-2.82</td>
<td>-12%</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class size</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>39</td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>37</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>38</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L:E ratio</td>
<td>34</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in total POS educators needed by 2003:</td>
<td>-11 257</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yearly change:</td>
<td>-2 251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural attrition per year</td>
<td>9 084</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The deficit is only on the public ordinary school (POS) educators' share of the budget.
e) With growth in wages at 1% below inflation and growth in budget at 1% in real terms.

As we noted above, in spite of all the possible efficiency improvements, it seems unlikely that one could achieve a target of devoting 85% of the budget to personnel even by the year 2005. A solution would be if wage growth could be restrained to 1 percentage point below inflation, and if the budget could grow at 1%. (Note that the average wage would not decrease at 1% below inflation, because of wage drift.)

The results would be as follows, which suggests a very small deficit in the POS account by 2005: well within the margin of error for this kind of analysis.

Table 4.6  Option E: wages decline by 1% and budgets increase by 1% per annum

<table>
<thead>
<tr>
<th></th>
<th>Actual 1999</th>
<th>Percent</th>
<th>Actual 2005</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget overshoot in POS educator cost (R b)*</td>
<td>-1.21</td>
<td>-5%</td>
<td>-0.19</td>
<td>-1%</td>
</tr>
<tr>
<td>Class size</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>39</td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>37</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>38</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L:E ratio</td>
<td>34</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in total POS educators needed by 2003:</td>
<td>-15 356</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yearly change:</td>
<td>-3 071</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural attrition per year</td>
<td>8 797</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The deficit is only on the public ordinary school (POS) educators' share of the budget.

This option meets both the educational concern of more resources to non-personnel expenditure, little or no retrenchments and an L:E ratio that is manageable as well as the financial considerations of a balanced budget. The option emphasises the following features:

- Real wage growth of –1% which, with wage drift of 0.6%, would result in the wage bill declining by 0.4% a year;
- Real budget growth of 1% a year;
- From the approximately 9000 teachers who exit the system annually, only 6000 posts will be filled;
- This will result in the average L:E ratio to increase from 34 to 37;
- Improves pass rates, lower substitution levels and workload as in options C and D.
4.3.2 Other policy suggestions

The suggestions above assume that "work effort" can more or less simply be intensified. However, this is easy to model, and hard to do. Furthermore, even if it was easy to do, work effort can always take on a simply ritualistic aspect: educators can be punctual, and work many hours, but the intensity and creativity of the effort can still be quite low. Thus, it is not enough to simply suggest that "work effort" be intensified.

Similarly, it must simply be recognised that pressure to hire more educators will always be intense. The task of optimal re-deployment so as to minimise the need for new hires or retrenchments is a difficult one. Carrying out these tasks require a tremendously enhanced analytical and informational underpinning to the management of personnel.

The following four policy suggestions are aimed at solving these problems.

a) Improvement in information systems and analytical capacity

We noted above that there were substantial implementation problems with respect to past policies, among other things because of a failure to fully cost out proposals for L:E ratios. While some improvements have been made, information problems continue to plague the sector, and little if anything has been done to resolve some key problems. For example, the current projections rely on very imprecise learner numbers. Some provincial enrolment counts seem to under-count schools by as much as 10%, and little systematic skill is applied to remedying these undercounts via statistical and other techniques. Provincial departments still pay too little attention to the information functions, be they EMIS or other. In some provinces there is a lone staff member ultimately in charge of these vital functions. In others the vital statistical units are not in the same town as the Department’s head office. In general, problems of a less-than-serious attitude to information and analysis are generic. In other provinces matters are improving, including, for example, the capacity to make PERSAL downloads and analyse them. But more needs to be done: efforts need to be tripled or quadrupled in this area. The national Department of Education has drafted guidelines for improvement, both as part of EMIS suggestions and as part of the norms for school funding. These must be implemented.

b) Intensify school-community involvement in demanding accountability

Personnel productivity and work effort problems will not be solved only via improved technical management proficiency in the provincial Departments, via high-level policy agreements with labour organisations, and via a “get tough” attitude no matter how much political backing it receives. Educator organisations are themselves not as tightly managed as it is often imagined, and what happens at the ground level is not always in line with national agreements. Thus, more will need to be done at community level to improve the ability of communities to demand accountability from educators and principals, and to enhance gradually but strongly, the sense of social contract between educators and parents, particularly around issues such as attendance, punctuality, and creativity and intensity of work effort. Efforts such as the COLTS campaign may well need to be intensified, but they must be: a) co-ordinated with the other managerial efforts discussed here, b) strong accountability, community awareness, and ability to pressure schools and enter into social contracts with them.

c) Management training in the use of tools to enhance accountability and productivity

As noted above, the education system is developing various accountability tools, including work descriptions, appraisal instruments, a Code of Conduct, and work effort guidelines. Furthermore, existing legislation and norms that can be used by managers to enhance
productivity are often misunderstood and not applied in a procedurally proper manner by managers. Thus, a proposed management training policy would suggest that all managers in the sector, including governing bodies, principals, area and district officials, receive management training specifically linked to the issue of educator productivity and the use of the by-then existing stock of tools. The training should be aware of, and cross-fertilise, with campaigns and efforts aimed at enhancing community pressure for increased accountability from the system.

d) Ghost teachers

Education departments are currently paying a number of teachers that should not be paid since these teachers either do not exist or are being paid two or even three salaries. The problem of ghost teachers is a problem that has emerged in many developing countries. Although the approximate number of ghost teachers in South Africa is difficult to estimate, there is evidence that this problem does exist in some provinces, particularly poorer provinces.

The main reason for this problem is the lack of control in entering new teachers onto the PERSAL system. Two separate, but related, initiatives are required. The first initiative entails a comprehensive audit of teachers currently employed by education departments. This would involve physical head-counts or physical payment of teachers as opposed to simple bank transfers. The second initiative, that is probably more urgent, is to improve control over the PERSAL system. This would involve tighter control of entry of new teachers onto the system as well as better administration of changes in status of teachers, including control of teachers who leave the system.
Chapter 5: Management and Quality

5.1 Introduction

This chapter reviews current and potential initiatives with respect to management and quality issues in education, including the use of the conditional grants.

In discussions between the Department of Finance and the Department of Education during the 1998/99 MTEF budget process, agreement was reached on the need to make critical interventions over a three-year period in the management of the education system and the improvement of quality in the system. The 1997 Education MTEF sectoral report focused on the need to address systemic problems such as high levels of repetition, low teacher productivity, high levels of under-age enrolment, quality assurance and other factors in the area of management which affect the performance of the system. Consensus was reached on these issues at the Heads of Education Departments Committee (HEDCOM), the Council of Educational Ministers (CEM) and elected officials. The Minister of Education also drew attention to the issues raised in the sectoral report by declaring 1998/99 as the year in which there will be a targeted focus on the functionality and performance of the school system. A Plan of Action echoing these concerns was presented to the education Portfolio Committee.

5.2 Overview of 1998/99 Conditional Grant

The 1998/99 budget made provision for conditional grant of R 200 million to the Dept. of Education. The grant was intended for improvements in financial management and quality enhancement. In the course of discussions between the DoF and the DoE, it was agreed that a significant part of the grant will be spent of financial management and related corporate management issues. The Department of Education decided to deploy the remaining funds more widely in the area of management. Sub-provincial (district and circuit levels) management process and systems were also to be targeted under this Programme.

It is increasingly apparent that district or sub-provincial level structures and systems are seriously lacking in the skills, resources and authority to define and implement a development agenda for educational institutions within their responsibility. Part of the answer to this problem appears to lie in the development of clearly defined and effective management systems that extend from provincial headquarters to the level of the institution.

The 1998/99 Programme has drawn attention to these problems by asking provinces to focus on districts with the poorest performing schools. In effect, middle managers are required to confront the problem, diagnose the dimensions of the problem and causes, and work on a plan of actions that covers the period of the Programme. Where the problem is rooted in the absence of basic management systems at school level, such as time-tabling, year plans, admission policies – these will be singled out for immediate attention. Districts and schools are being challenged to compare their performance to other similar schools and localities – and to account for the wide disparities.

The 1998/9 programme consists of the following project based interventions:

- Education management development
- Quality assurance capacity and systems
- The Culture of Learning, Teaching and Service Campaign (COLTS)
- Professional development of teachers/curriculum 2005
Corporate level financial and other management services
District development projects

The project allocations are detailed in the following table:

Table 5.1 Budget for 1998/9 conditional grant to Education

<table>
<thead>
<tr>
<th>Project</th>
<th>Allocations (Rand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Development Project</td>
<td>100 000 000</td>
</tr>
<tr>
<td>Teacher Development</td>
<td>45 000 000</td>
</tr>
<tr>
<td>Education Management Development</td>
<td>29 000 000</td>
</tr>
<tr>
<td>COLTS Campaign</td>
<td>7 750 424</td>
</tr>
<tr>
<td>Provincial Assistance Unit</td>
<td>10 000 000</td>
</tr>
<tr>
<td>Quality Assurance</td>
<td>5 000 000</td>
</tr>
<tr>
<td>Management Support</td>
<td>3 197 370</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200 000 000</strong></td>
</tr>
</tbody>
</table>

Although business plans for the above projects were submitted in April 1998, the funding on was only released by DSE on 6 August 1998. This unfortunate delay means that it unlikely that the qualitative impact of these interventions will be measurable until mid-1999.

5.3 Management and cost control issues

5.3.1 Learner Support Materials

There is sufficient research evidence that points to the immediate gains to be achieved from high levels of resourcing in the teaching and learning process – even if only in the form of textbooks. The last four years has witnessed a precipitous decline in provincial allocations to books. In some cases the per capita expenditure is alarmingly low and will have a direct impact on the quality of learning and teaching. This situation suggests the need for attention to two issues: a) the cost of materials and b) the need to establish and maintain a norm for allocations to materials.

A serious attempt should be made to systematically lower the cost of learning and teaching materials. We currently use relatively expensive books assuming that they last a few years. The cost of materials is also directly influenced by the size of print runs. As many provinces move towards systems that allow for greater choice at school level concerning titles, economies of scale are lost. Smaller print runs are also acting as a disincentive to the publishing industry.

One response to this problem is to investigate the utility and cost effectiveness of materials that last only a year. Currently, though it is assumed that textbooks are returned every year, this is not a certainty.

A second response is to work towards an allocation norm for learner support material. The norm could be applied differentially to favour rural areas and township communities. This would reduce the burden of allocating on a universal basis and also re-enforce the funding norms developed within the scope of the SA Schools Act. The norm also needs to signal that departments are willing to ensure the resourcing of classrooms as a priority rather than as a discretionary expense. The process of establishing such a norm and maintaining it will be
difficult in view of the persistent and growing pressures that personnel costs impose on all other expenditure items.

### 3.5.3.2 System inefficiencies

Most of those that were identified in the personnel section and in the table above highlighted the need for human resource development. A natural division into three categories was made. At the end of each one, a specific recommendation has been lifted out.

#### a) School or district-based management issues

- Time on task (punctuality and attendance of teachers and learners)
- Inventory control and maintenance of text-books
- Subject choices and teacher allocation
- Routine management e.g. attendance records
- Contract-like performance monitoring for officials
- Instituting a notion of social performance contracts up and down the system as a basis of accountability

The education system requires additional tools to evaluate the quality of educational provision. Matric pass rates are not an adequate measurement of quality for the system as a whole. They provide a crude assessment of quality at the senior secondary school level. Measurable performance indicators are required at all levels of the school system. The development of a set of indicators and the monitoring thereof can be done jointly by provincial education departments and NGOs.

The concept of accountability (based on measurable performance indicators) of the institution should be developed in a way that encourages each school to accept responsibility for its own development in partnership with the Department, the community and other agencies that can assist. This would mean that schools are held accountable for their pass-rate, the presence of under-age learners, etc. The Department should make a conscious effort to identify poor performing schools. A special task team of educationists can be established to assist schools to improve their performance.

#### b) Systems management issues:

The following list highlights issues that were identified by provincial education departments in discussions on the problems of management in the education system.

- Poor administration with respect to correspondence and telephones, i.e. customer service inadequacies;
- Possible financial losses through accounts not paid on time e.g. loss of discounts;
- Statistical management - both the accuracy thereof, and its management use;
- Costs of inputs such as supplies and services;
- Output costs, e.g. teacher-training bursaries vs employability;
- Inefficient examination system, particularly with regard to wastage, high costs in personnel and materials, labour-intensity, absence of income generation, no-shows, open access to the examination for all, most come away with nothing. The need for an in-depth study is highlighted;
- Macro personnel costs

A specific area that requires urgent attention is the cost and efficiency of the current examinations system. This study should focus on improving efficiency and reducing cost while maintaining high standards and ensuring the credibility of the system. At the same time it may be possible to address quality issues.
c) Educational management issues:

- The need to implement accountability systemically or systematically, and to make individuals feel professionally responsible, and immersed in a system of binding social and bureaucratic contracts;
- Match good and bad performers as part of development;
- Whole school development;
- Teacher job description;
- Educator appraisal systems;
- Implementation and enforcement of code of conduct; and
- Job descriptions for officials (e.g. circuit, district and head office), not just for educators.

Simultaneous to the introduction of the appraisal system for professional growth, systemic steps should be taken to develop the accountability of the individual educator. Improving productivity in the classroom is a complex task. The Code of Conduct for Educators as drawn up by the SA Council of Educators is a comprehensive document that serves the basis for increased work effort from teachers. The education system required rewards and penalties to promote good teaching. On the department’s side, support programmes for teacher development must be improved. INSET (in service training) is an innovative method of improving the skills base of individual teachers.

5.3.3 Examination systems

A specific area that requires urgent attention is the cost and efficiency of the current examinations system. The current examination system is inefficient, particularly with regard to wastage, high costs in personnel and materials, labour-intensity, absence of income generation, no-shows, open access to the examination for all.

A study should focus on improving efficiency and reducing cost while maintaining high standards and ensuring the credibility of the system. At the same time it may be possible to address quality issues.

5.3.4 Transfer payments

Some provinces have made strides in the development and implementation of systems that handle a range of routine school level functions through transfer payments. These functions include payments for textbooks, stationery, other goods and supplies, non-teaching staff, routine maintenance. This mechanism allows schools to make their own purchases when they choose to, from whom they want, what they want and at the price most appropriate to their budgets. In general, items where efficiency savings are possible, these should be devolved to school level. Some items, such as textbooks, have diseconomies of scale as they are devolved to lower levels. This should be borne in mind.

It needs to be acknowledged that this mechanism implies a level of management capacity that may not exist at all schools in the immediate future. The Schools Act makes provision for the devolution of such functions but the practicalities will require further work.
5.4  Education Conditional Grant 1999/2000

The MTEF makes provision for conditional grants to Education over three years. For 1999/2000 an indicative amount of R400 million was proposed. The Department of Education is still in the process of finalising a set of priorities for the 1999 Programme. However there are priorities that will carry over from the 1998/99 Programme.

- District Development Project
- Teacher Development/Curriculum 2005
- Provincial Support Unit

It is possible that issues concerning Further Education and Training and the college sector will need to be addressed as a priority next year. Likewise, a number of the issues raised by provinces in this chapter are to be considered for priority action.
Chapter 6: Funding Skills Development

6.1 Policy context

Skills development in this paper is used as a collective terms to include further education and training (FET) consisting of senior secondary schools, technical/community/youth colleges, adult basic education and training (ABET), and the skills development strategy of the Department of Labour (DoL). In particular, the paper will focus on the expenditure and policies relating to skills development for young adults aged 16-30 at the general and further education levels.

There are a number of reasons for isolating this branch of training for special attention. Firstly, the changing international context and resulting competitive pressures have made skills development a prerequisite for growth – a key South African focus in order to uplift its population. The South African heritage in terms of vocational and technical education is weak – this has left us, from a comparative perspective, with proportionately low levels of skilled individuals and too few people at secondary school level enrolled in technical and vocational institutions. While approximately 50 per cent of school-age pupils in OECD countries are enrolled in technical and vocational institutions this is true of only 1 per cent of South African secondary school students.

High levels of youth unemployment and skills shortages in critical areas can also be related to the system of skills training. Approximately half of the four million unemployed in South Africa consist of young people with more than nine years of schooling who queue for years to obtain their first job and any associated workplace learning. It is therefore critical to focus on the budgetary sources allocated in this direction and the efficiency of its use.

Secondly, recognition of these challenges has given impetus to policy initiatives focused on skills development. A number of new policy frameworks and legislation developed during the last year can be mentioned.

- The Dept. of Labour’s Skills Development Bill;
- The Green and White Papers on FET, as well as an FET Bill by the Department of Education (DoE);
- A National Multi-year Implementation Plan for ABET from the DoE; and
- A National Youth Policy from the Youth Commission.

In addition to these policy developments at the national level, many of the provinces have also developed new policies and strategies for technical colleges, ABET and youth colleges. For example, Gauteng has initiated a quantitative and qualitative audit of all 33 technical colleges in the province, in order to develop new policies which will increase equity, effectiveness, efficiency and responsiveness in this sector. The Western Cape Education Department has developed a plan for the 18 technical colleges in the province, which rationalises them into nine cost-effective clusters and promoted increased learning opportunities. Proposals around skills development will also be central to the forthcoming Jobs Summit.

The range of different policy initiatives for skills development at the national and provincial levels have accelerated the need for a national integrated human resource development (HRD) strategy. This is supported by the office of the Deputy-President and has resulted in

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6 The Department of Finance wishes to acknowledge the support of the GTZ in the production of this chapter.
the DoE and DoL holding joint meetings to agree on a conceptual framework. The MTEF process provides an opportunity to take stock of these developments.

The broader area of skills development also ties closely with the issue of efficiency and quality of secondary schooling, providing a third reason to focus here. Congestion in the schooling system is partly a result of low flow through and high repeat rates because appropriate alternative learning paths and job prospects do not exist for students not inclined to academic training and for youths past the normal school-going age but unemployed. Providing these alternative paths will contribute to decongesting the school system and reduce the sometimes inappropriate demand for university and technikon places. Getting things right in this sphere can therefore result in a much more productive educational system.

Consequently, this section of the report provides an overview of resource allocation to this sector and evaluates current policy directions and outcomes. After identifying key characteristics, recommendations are made to enhance current initiatives in this sphere.

6.2 Expenditure and enrollment

6.2.1 Data on Skills Development

Because a number of government agencies and private sector bodies are active in the sphere of FET, it is not straightforward to survey expenditures and employment levels. Comprehensive data on the sector is not available. Consequently, this report relies on a wide range of data, mostly sourced directly from responsible institutions. As a result the analysis must be seen as indicative and not exhaustive. The absence of comprehensive database also leads to uneven coverage of regions and provinces, with better-resourced provinces generally represented to a greater extent.

The key conclusion of this is that a total of some R10.0 billion to R12.5 billion is channeled into FET annually, of which government accounts for more than R8 billion.

Table 6.1 Expenditure on secondary schooling and technical colleges: 1995/96 to 1997/98

<table>
<thead>
<tr>
<th></th>
<th>1995/6</th>
<th>1996/7</th>
<th>1997/8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per FTE student</td>
<td>Spend (R’000s)</td>
<td>Per FTE student</td>
<td>Spend (R’000s)</td>
</tr>
<tr>
<td>Public Secondary Schools¹</td>
<td>R2 813</td>
<td>R10 313 405</td>
<td>R3 198</td>
</tr>
<tr>
<td>Technical Colleges²</td>
<td>R7 987</td>
<td>R 522 944</td>
<td>R7 036</td>
</tr>
</tbody>
</table>

1. Junior and senior secondary schools are included in all the tables. Because senior secondary figures are not produced separately, the NCFE estimated their costs to be R6.5 billion in 1996 with an average per capita cost to the state of R3 336 per year.
2. Only the N1-N3 courses are classified as FET.

Table 6.1 indicates that expenditure on public secondary schooling and technical colleges came to about R10.8 billion in 1995/96 and R 12.5 billion in 1997/98, an average annual increase of 7.6%. The National Committee on Further Education estimated that in 1996, R6.5 billion of the school expenditure (R3 336 per capita) and R354 million of Technical College spending (R6 000 per capita) could be classified as FET expenditure.
The information available indicate the following:

- There are inadequate disaggregated data on personnel numbers and costs for the sector. The absence of official breakdowns between junior and senior secondary (FET) figures is problematic.

- The cost of education at technical colleges is high relative to secondary schooling in terms of cost per full-time equivalent student and FTE educators. In 1997/98 cost per FTE in secondary schools came to just over R3 000 compared to R 7 000 in technical colleges, partly driven by cost per educator that can be as much as 50 per cent higher in technical colleges than in schools.

- Per capita costs vary significantly across the provinces. In the case of secondary schools, the range is from R1 966 (Eastern Cape) to R4 734 (Northern Cape), while in the case of technical colleges the range is from R4 971 (Eastern Cape) to R9 576 (Northern Cape) in 1997/98. Different factors account for high provincial per capita costs: for example, in the case of Northern Cape, it is the small pupil numbers over a vast geographic area, while in the urban provinces such as Gauteng and Western Cape, it is the high level of educator costs.

- The small total expenditure on technical colleges relative to secondary schools: somewhat less than 5 per cent of that spent on secondary schools.

- The small number of students enrolled in technical colleges relative to secondary schools: some 94 000 FTEs as opposed to 3.9 million pupils in secondary school in 1996.

- The expenditure bulge in 1996/7 financial year which was largely due to higher educator salaries and the broad banding process.

- The decrease in per FTE student expenditure at technical colleges from 1995/6 to 1997/8.

- An apparent decrease in personnel expressed as full-time equivalents technical colleges between 1994 and 1996.

### 6.2.2 Youth Colleges

In addition to the expenditure of the provinces on FET and ABET, there is also R160 million earmarked for youth/community colleges which is held by the DoE. The programme is designed to provide access to education and training opportunities for ‘out-of-school’ youth, unemployed and pre-employed young adults. Given the demographic profile of this group, the focus is on young adults from historically disadvantaged communities. The Programme has only been fully operation in all nine provinces since November 1997. The Gauteng Youth College was initiated as a pilot in 1995 and the Western Cape Access Consortium began operating shortly afterwards. Both these models are significantly different in their focus and offerings.

As youth colleges are intended to provide second chance, bridging and vocational training for young adults, this line item should be seen as part of the funds available for skills development.

The following table illustrates the amounts allocated to the different provinces. Because youth colleges are a new national initiative designed to kick-start learning opportunities for
out-of-school, out-of-work youth trend analysis is impossible. Gauteng is not reflected in the budget because it received an earlier RDP grant for its youth college initiative.

Table 6.2 Estimates of expenditure for youth and community colleges

<table>
<thead>
<tr>
<th>Province</th>
<th>Total Allocation 1996/97 to 2000/01</th>
<th>Actual 1997/98 Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Cape</td>
<td>17 474 000</td>
<td>7 007 753</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>23 996 000</td>
<td>7 356 507</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>11 580 000</td>
<td>710 168</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>29 495 000</td>
<td>9 120</td>
</tr>
<tr>
<td>Free State</td>
<td>15 923 000</td>
<td>4 566 618</td>
</tr>
<tr>
<td>North West</td>
<td>17 828 000</td>
<td>1 188 862</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>16 113 000</td>
<td>1 665 476</td>
</tr>
<tr>
<td>Northern Province</td>
<td>22 408 000</td>
<td>4 048 680</td>
</tr>
<tr>
<td>Gauteng</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>154 817 000</td>
<td>26 553 184</td>
</tr>
</tbody>
</table>

Despite this being such a new initiative, the DoE database indicates that there are already some 18 000 learners at youth colleges in 1998. This figure is expected to increase as the programme becomes fully operational in late 1998 and early 1999. The Gauteng Youth College with its four satellite campuses offers vocational and technical training in six-month and one-year courses. “Second chance” standard 10 subjects and bridging courses are also offered.

Table 6.3 Expenditure on Gauteng Youth Colleges (R’ 000)

<table>
<thead>
<tr>
<th></th>
<th>1996/97</th>
<th>1997/98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>24 000</td>
<td>20 000</td>
</tr>
<tr>
<td>Expenditure</td>
<td>5 500</td>
<td>11 400</td>
</tr>
</tbody>
</table>

6.2.3 Training Budget of the Department of Labour

Nearly 75 per cent of the money allocated to human resource development by the DoL consist of transfer payments to training institutions. Not all of this expenditure targets young adults. The National Committee on Further Education estimated the DoL’s expenditure at the FET level to be some R76 million in 1996. The medium term expenditure estimates for the DoL project allocations for human resource development in the Department to more than double between 1998/99 and 2000/01.

Table 6.4 Human resource development expenditure: Depart. of Labour 1996/7 - 1998/9

<table>
<thead>
<tr>
<th></th>
<th>1996/7</th>
<th>1997/8</th>
<th>1998/9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>R218,015,055</td>
<td>R162,875,748</td>
<td>R184,847,054</td>
</tr>
<tr>
<td>Training Transfers</td>
<td>R126,032,581</td>
<td>R126,032,581</td>
<td>R278,079,000</td>
</tr>
<tr>
<td>Projected Total Expenditure</td>
<td>R278,079,000</td>
<td>R205,833,000</td>
<td></td>
</tr>
<tr>
<td>Projected Training Transfers</td>
<td>R205,833,000</td>
<td>R205,833,000</td>
<td></td>
</tr>
</tbody>
</table>

6.2.4 Adult Basic Education and Training (ABET)
The data in Table 6.5 suggest erratic expenditure on ABET: in some provinces it increases from one year to the next, in others it decreases, without any clear pattern emerging across rural/urban provinces. This is the result of a number of factors:

- The legacy of pre-1994 budgets for ABET;
- Different provincial priorities;
- Cost-cutting pressures during the budget processes;
- The elimination of inefficiencies in provision resulting in lower costs the subsequent year;
- The classification of ABET as non-personnel expenditure even though the funds for ABET largely subsidise adult educators’ salaries. In a situation of overspending, some provinces have been driven to suspend ABET budgets for the last three months of the financial year in order to release those funds for other purposes.

Some ABET expenditure would be on older people, but it is virtually impossible to separate out the expenditure on young adults. The amount spent will substantially be higher if NGO contributions and private sector spending on ABET were to be included.

Table 6.5  ABET Expenditure (R '000)

<table>
<thead>
<tr>
<th>Province</th>
<th>1996/7</th>
<th>1997/8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>36 205</td>
<td>65 542</td>
</tr>
<tr>
<td>Free State</td>
<td>17 698</td>
<td>13 727</td>
</tr>
<tr>
<td>Gauteng</td>
<td>20 842</td>
<td>43 414</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>21 220</td>
<td>22 748</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>32 908</td>
<td>29 830</td>
</tr>
<tr>
<td>North West</td>
<td>36 967</td>
<td>69 781</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>3 907</td>
<td>4 644</td>
</tr>
<tr>
<td>Northern Province</td>
<td>19 752</td>
<td>16 912</td>
</tr>
<tr>
<td>Western Cape</td>
<td>17 271</td>
<td>21 436</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>R206 771</strong></td>
<td><strong>R288 034</strong></td>
</tr>
</tbody>
</table>

### 6.2.5 Conclusion

Adding up the expenditure of the different sub-sectors on skills development aimed at young adults it is clear that a substantial investment of around R7.5 billion is made annually by the departments of Labour and Education on skills development for young adults. The National Committee on Further Education has provided a “conservative” estimate of more than R10 billion in 1996 from public and private funds for these purposes. The productivity of this sizeable investment is clearly an important matter.
6.3 Efficiency challenges in skills development

The previous section provided a brief overview of expenditure on FET in South Africa. It is of course difficult to decide whether the total allocation of resources to this sector is adequate. A number of aspects common to the four areas of expenditure do suggest that, as is the case with personnel expenditure, the problems in this sector do not relate only to aggregate resources available but also to how these resources are utilised. These aspects are low learner to educator ratios, inordinately small institutions, poor throughput rates, the proliferation of courses, costly examination processes, and under-utilisation of facilities. Attention to these issues may enable more efficiency and greater output within the current resource constraint.

6.3.1 Low learner to educator (L:E) ratios

In public ordinary schools the L:E ratio dropped from 34:1 in 1995 to 32:1 in 1996. It would be important to track this in 1997 and 1998 in order to see whether the lower trend continued. If it did, then teacher salaries will have risen while their numbers increased - producing an unsustainable rise in personnel costs. The DoE figures indicate a rise in personnel costs from 83 per cent in 1995/6 to 85.21 per cent in 1997/8.

Low L:E ratios are a feature of technical colleges, although there have been attempts to increase these from 11:1 to 20:1 as agreed at the ELRC. In the Western Cape, the provincial ELRC has agreed to phase in the 20:1 L:E ratio moving from 16:1 in 1996 to 20:1 by January 2000. It has also agreed to a weighting of 2.5 for workshop/laboratory situations involving potentially dangerous materials or equipment where 20:1 would contravene the National Occupational Safety Act. In order to afford this low L:E ratio (8:1) in hazardous situations, higher ratios are used in ordinary classes. Thus 20:1 is only used as an average goal with considerable variation upwards and downwards around it.

6.3.2 Small institutions

In the case of technical/youth/community colleges, many function on a scale that suggest cost-inefficiencies. The Gauteng Audit of Technical Colleges indicates that size ranges from 500 FTEs to 2 500 FTEs with the majority in the middle of the range. Efforts are being made to define the most appropriate size of colleges in relation to cost, current and future needs, management capacity, programme choices and a range of other factors.

6.3.3 Poor throughput rates

As a result of high repetition, dropout and failures, throughput rates are very poor in senior secondary schools, technical colleges, and ABET classes.

The repetition rate for Africans who are the majority of learners in schools has increased some 75 per cent in secondary schools (Crouch and Mabogoane, 1997) with grades 1, 8, 9, 10, 11 and 12 experiencing the highest rates. In senior secondary schools, which are in the FET band, repetition rates are as high as 24 per cent for grade 10, 27 per cent for grade 11 and 40 per cent for grade 12.

By contrast, dropout rates in senior secondary schools have improved since the 1980s but they still run at 12 and 14 per cent for grades 10 and 11 respectively (Crouch and Mabogoane 1997:23).
At technical colleges the repetition rates are not much better. According to the preliminary figures obtained in the Gauteng Audit of Technical Colleges, repetition rates in the province’s technical colleges average 40 per cent in engineering courses N4-N6. Dropout rates for all courses average 10-15 per cent.

In the Western Cape, the National Access Consortium of youth/community colleges reports repetition and dropout rates of 10 per cent for ABET levels 1-3 and 90 per cent for ABET level 4. This cluster of institutions offers academic and technical vocational courses, from ABET, through FET, to higher education at level 5. Repetition is not an issue in the non-ABET courses because students are counselled and re-directed to more appropriate programmes.

ABET courses typically have high repetition and dropout rates. Poor throughput rates are partly the result of less contact time than school pupils have. ABET classes that are suspended because of budget cuts also decrease contact time. Figures from the Independent Examination Board (IEB) indicate that there is a 30 per cent dropout between registrations for ABET examinations and papers written.

6.3.4 Proliferation of courses

Another key factor, which drives costs upwards, is the proliferation of courses offered in many institutions.

In the technical colleges, the NATED 191 indicates that formal programmes number more than 2 000. Informal courses would increase this figure.

In the case of technical colleges, recent expansion into higher education programmes (N4-N6) and academic standard 10 subjects has increased the number of courses, with the number of learners per course very low. The Gauteng Audit has identified some 950 course offerings across the 33 technical colleges in the province, many with only a handful of students writing the examinations.

National data on the youth colleges suggest that a wide range of courses are already offered. This must be understood in terms of a new initiative attempting to respond to the "real needs" of learners and the fact that in many colleges there is spare capacity that has not been taken up.

6.3.5 Costly examination processes

In technical colleges and ABET programmes examination processes are costly. Different factors contribute to the high cost of examinations.

The National Language Policy, small numbers of candidates, and the high costs of building testing capacity, test development, registration, administration, scoring and reporting all account for high examination costs in ABET. The setting of a single unique paper can easily cost R10 000. In cases like Xitsonga where less than 150 candidates have sat for examinations, costs rise higher.

IEB estimates indicate that ABET level 3 examinations amount to R46 per learner script as direct costs. ABET levels 1 and 2 cost some R38 and R37 per script. Real costs of ABET examinations including all the IEB overheads and ongoing developmental work are as high as R120 per subject examined. The IEB believes that cost savings are really only possible from economies of scale in terms of overheads and the printing of the examinations.
Information about technical college examinations quoted in the press (Evening Post 13/5/98) indicate that 315 question papers were developed for engineering courses in one trimester. Examinations are conducted 5 times a year for trimester, semester and year programmes and encompass some 1 million subject enrolments for an estimated 400 000 students writing more than 2 000 external examination papers.

Examination costs for the youth/community colleges and standard 10 (grade 12) could not be obtained.

### 6.3.6 Under-utilisation of facilities

The vast majority of institutions are used mainly in the morning, somewhat in the afternoon and almost never at night or during the weekends and vacations. In the case of specialist facilities such as laboratories and workshops, under-utilisation is an even bigger problem.

### 6.3.7 Low success rates

The high dropout and repeater rates translate into poor success rates in senior secondary schools, technical colleges, ABET programmes and youth colleges.

In 1997 there was only a 47 per cent pass rate in the standard 10 examinations, a 7 per cent drop against the previous year’s results. The matriculation exemption rate dropped from 15 per cent in 1996 to 12 per cent in 1997. Crouch and Mabogoane estimate that 36 years of learner effort are required to obtain a standard 10 pass.

In general the pass rate in technical colleges is low. National figures (Evening Post 13/5/98) and the preliminary figures from the Gauteng Audit suggest pass rates of 50 per cent on average. Th Gauteng Audit reveals a higher average pass rate of 65 per cent in Gauteng technical colleges.

#### Table 6.6 National Pass Rates (June 1998) for Technical Colleges

<table>
<thead>
<tr>
<th>Course Type</th>
<th>National Average</th>
<th>National % pass (enrolled)</th>
<th>National % pass (written)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIC courses</td>
<td>38.91</td>
<td>19.11</td>
<td>34.06</td>
</tr>
<tr>
<td>Business Studies N1-N3</td>
<td>40.83</td>
<td>44.96</td>
<td>54.48</td>
</tr>
<tr>
<td>NSC courses</td>
<td>51.15</td>
<td>21.57</td>
<td>66.67</td>
</tr>
<tr>
<td>Business Studies N4-N6</td>
<td>46.28</td>
<td>60.40</td>
<td>68.01</td>
</tr>
<tr>
<td>Engineering</td>
<td>38.96</td>
<td>41.80</td>
<td>48.34</td>
</tr>
</tbody>
</table>

Success rates for the learners in the youth colleges are only available from two provinces: Gauteng, because its Youth College has been in operation longer, and the Western Cape, where the National Access Consortium has been in operation for a number of years. Figures from the Gauteng Youth College indicate that the pass rates are very poor.

These figures are disturbing but cannot be used as a benchmark to judge all interventions in this area given the wide variations in the institutional models, the reactions to a new curriculum and a range of other factors which have affected Gauteng’s efforts in this area. They do, however, suggest a re-think of demand issues in the young adult target group.
whether the courses on offer are appropriate and more cost effective means of delivering to this constituency.

Table 6.7 Gauteng Youth College: Academic Courses Nov/Dec 1997

<table>
<thead>
<tr>
<th>Subject</th>
<th>Wrote</th>
<th>Passed</th>
<th>Failed</th>
<th>% Pass</th>
<th>% Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate Maths</td>
<td>545</td>
<td>4</td>
<td>541</td>
<td>0.73</td>
<td>99.2</td>
</tr>
<tr>
<td>Advanced Maths</td>
<td>277</td>
<td>13</td>
<td>264</td>
<td>4.69</td>
<td>95.3</td>
</tr>
<tr>
<td>Business Management</td>
<td>530</td>
<td>15</td>
<td>512</td>
<td>2.83</td>
<td>97.2</td>
</tr>
<tr>
<td>English</td>
<td>1 555</td>
<td>149</td>
<td>1 406</td>
<td>9.58</td>
<td>90.04</td>
</tr>
<tr>
<td>Computer Science</td>
<td>674</td>
<td>0</td>
<td>628*</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

* Figures were given with discrepancies between numbers who wrote, passed and failed.

These results are worrying because in no case was there a pass rate above 10 per cent. Results for technical/vocational courses in 1997 are somewhat better. In Business Studies the average pass rate was 34.43 per cent, but in each case the results are worse than the national average.

ABET programmes typically have very poor pass rates, as the table below shows.

Table 6.8 ABET results

<table>
<thead>
<tr>
<th>Year</th>
<th>No of learners who wrote</th>
<th>No of learners who passed</th>
<th>Percentage pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 1996</td>
<td>21 288</td>
<td>10 301</td>
<td>48.4%</td>
</tr>
<tr>
<td>Nov 1997</td>
<td>27 080</td>
<td>11 180</td>
<td>41.0%</td>
</tr>
</tbody>
</table>

In addition to low average pass rates, composition of output is also a problem. A recent analysis by the IEB (French, 1997) shows that there is a lower demand for numeracy papers compared to communications and lower success rates in Numeracy/Mathematics at ABET levels 3 and 4.

Programmes for the training of the unemployed, which are funded by the DoL, have achieved very low placement rates. However, a DoL spokesperson has indicated that the average placement rate of 20 per cent has improved recently to 30-40 per cent.

6.3.8 Conclusion

While the absence of comprehensive data makes it difficult to present final results, indications from a broad spectrum of information are that the system is experiencing efficiency problems. Current skills development courses for young adults, whether academic or technical/vocational, seldom achieve pass rates above 50 per cent. Thus the returns on the investment of some R7.5 billion per annum are low.
6.4 Future policy options

The 1997 MTEF Policy Statement indicated broad policy directions for education and training expenditure in the medium term:

- Employment creation through improving the skills base of labour and identifying key employment-generating opportunities was a government priority.
- A significant expansion in public and private spending on training and vocational education was a macro-economic priority.
- The creation of learnerships as outlined in the DoL's Skills Development Strategy would be important to bridge the gap between formal education and work experience, especially in the case of young work-seekers.
- The main educational challenge is to improve the quality of schooling by addressing glaring inequalities, increasing efficiency and improving effectiveness.
- Because the demographic peak in 1996 was the 10-14 year-old age group, FET provision would have to keep pace with increasing enrolments for the next 5-10 years.
- FET provision should be based on cost sharing by government, employers and households. In order to promote equal access to learning opportunities, government spending would be targeted on poor communities.
- Growth of spending on personnel must be curtailed. Quality-enhancing initiatives and improved management would be essential to increase efficiency. FET institutions should be rationalised.

These serve as general guidelines for the funding of skills development for young adults. More specific initiatives and policy options are considered below. These have been divided into two main categories: FET initiatives and ABET initiatives.

6.4.1 Further education and training (FET)

In the White Papers and the Bill on FET, the Ministry of Education indicates that FET policy must directly address both the transformation of senior secondary schooling and the development of new meaningful education and training opportunities for young people outside schools, as well as working adults and the long-term unemployed.

The Ministry's short- and medium-term objectives are to invest in the youth of the country by increasing the range, quality and relevance of programmes offered to youth in and outside schools. Programmes which integrate theory and practice and forge closer links with the world of work are seen as essential. For youth out of schools, learning opportunities in public colleges, which as open learning FET institutions are more suitable for young adults, will be expanded and job-entry and skill development programmes will be initiated.

In order to realise the long-term goal and the short- and medium-term objectives, a careful sequencing of developmental and policy initiatives in short- and medium-term phases will be necessary.

Short-term initiatives
These can be grouped into three main areas: developmental, efficiency and demand-side funding initiatives:

(a) Developmental initiatives

The development of programmes and qualifications and registration on the National Qualifications Framework (NQF) will be a key component of future strategies. This is necessary in order to increase and ensure the quality and relevance of courses and to expand the range of available programmes, with special attention to more vocationally orientated programmes. Development of well-defined programmes and qualifications is also the basis for the introduction of programmatic funding and is therefore of critical importance.

This will place a premium on the work of the South African Qualification Authority (SAQA) and its related bodies. In particular, the National Standards Bodies (NSBs) and Standards Generating Bodies (SGBs) will be involved in developing unit standards and qualifications. In addition, providers, Education and Training Quality Assurers (ETQAs) and Sectoral Education and Training Authorities will have to undertake curriculum development and establish quality assurance mechanisms.

Both the national departments of Education and Labour will contribute funds for this purpose. In the DoL’s projected Public Appropriation for 1998/9 - 2000/1, there is a line item for a start-up and innovation fund to be used for the development of unit standards and qualifications; course development by providers and SETAs; and provider upgrading. In addition, foreign donors have contributed funds for these purposes.

Table 6.9  Dept. of Labour projected appropriations 1998/9 – 2000/1

<table>
<thead>
<tr>
<th></th>
<th>1998/9 (R'000)</th>
<th>1999/2000 (R'000)</th>
<th>2000/1 (R'000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learnerships</td>
<td>50 000</td>
<td>147 500</td>
<td>230 000</td>
</tr>
<tr>
<td>SMEs</td>
<td>50 000</td>
<td>75 000</td>
<td>150 000</td>
</tr>
<tr>
<td>Unemployed training</td>
<td>30 000</td>
<td>50 000</td>
<td>80 000</td>
</tr>
<tr>
<td>Other training</td>
<td>26 000</td>
<td>50 000</td>
<td>50 000</td>
</tr>
<tr>
<td>Start-up and Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- SAQA</td>
<td>6 000</td>
<td>12 000</td>
<td>12 000</td>
</tr>
<tr>
<td>- Course development</td>
<td>6 000</td>
<td>12 000</td>
<td>12 000</td>
</tr>
<tr>
<td>- Provider upgrading</td>
<td>14 000</td>
<td>26 000</td>
<td>26 000</td>
</tr>
<tr>
<td>Administration</td>
<td>18 000</td>
<td>27 500</td>
<td>40 000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200 000</strong></td>
<td><strong>400 000</strong></td>
<td></td>
</tr>
</tbody>
</table>

*The administration costs are likely to be lower as soon as the SETA’s levies come into effect because these will pay for their administration costs.

In the case of the Dept. of Education, adequate funds must be set aside in 1999 to ensure that the work of standards generation and quality assurance proceed apace and the essential programme and qualifications development work will be undertaken by the field.

(i) Management capacity-building
Developing management capacity at all levels will be essential to bring about a comprehensive, co-ordinated and interlocking FET system with greater institutional autonomy that can provide meaningful educational experiences for young adults.

In 1999 a two-pronged strategy should be implemented to improve management capacity at the systemic and institutional levels. The capacity of the national and provincial departments to guide and support the development of the new FET system must be strengthened. The National Board for Further Education and Training (NBFET) and provincial advisory bodies must be established to guide and support the short- and medium-term development of the FET system. Simultaneously, the leadership of the different types of colleges must be targeted for management training with particular emphasis on strategic planning skills. It will also be possible to identify well-running institutions from both the public and state-aided college sector to pilot a more comprehensive management training package that would include financial and managerial information skills.

The priority of management development in these spheres may make dedicated funding from the national departments an appropriate mechanism.

(ii) Information Systems

A transformed FET system will require effective information systems at national, provincial and institutional levels in order to plan, report, monitor and evaluate skills development programmes for young adults. The existing EMIS systems will have to be evaluated with a view to the information needs of the new FET system and adapted where necessary.

Site-specific information systems involving student, staff, learning programme and financial information will also be an essential management tool and a prerequisite for the introduction of programmatic and output-oriented funding and for measuring performance. Student tracking will also be necessary to evaluate the success of programmes.

In addition, FET institutions will need to access local labour market information and provide career advice and counselling to students. In the interim this will require them to work closely with the DoL's provincial HRD and employment service officers. In the future, these services will be offered by some 170 Labour Centres which will provide referrals for training, assessment, job opportunities and career guidance to employees, learners, the unemployed, employers and providers under the new Skills Development Strategy (SDS).

In 1999 it will be essential to begin developing the institutional information systems. International experience suggests that top-down bureaucratic approaches to new information systems do not work well. However, the design of broad specifications should be done by the Department of Education and the Department of Labour together. Consortia of colleges can then work with IT consultants to design systems which meet their needs within these broad specifications.

(iii) New Funding Framework for FET

Work will have to begin in earnest in 1999 to develop new funding methods in line with the DoE's commitment in the White Paper to programmatic funding for FET institutions.
A two-pronged strategy will be required: a fast-track approach to identifying, developing and costing vocationally-oriented programmes which senior secondary schools will want to introduce into their curricula. A good example is a Hospitality programme as a substitute for Domestic Science that has been developed by the Hospitality Industry Training Board and already introduced in a few high schools.

Once a number of these can be identified and costed, it should be possible for schools to access add-on funding as an incentive to run these programmes, in a way that will not interfere with the norms and standards for ordinary school funding. This additional funding will encourage diversification of the senior secondary curriculum and give schools experience in accessing programmatic funding.

The second prong of the strategy will concentrate on the longer-term challenge of devising a new funding framework for FET institutions. This consists of four elements: formula funding of programmes, earmarked funding, student financial aid and income generation.

Formula funding for programmes will be based on the relative costs of providing different programmes to an average student, and will take into account staff salaries, learning materials, maintenance costs and other relevant expenses. Funding units will be expressed in terms of full-time equivalent (FTE) enrolments, and will include an outcomes-related element, to encourage learner retention and success. Funding will be the same for any given programme, regardless of the mode or locus of delivery.

Earmarked funds will be used for specified purposes, which enjoy national priority, such as capacity building, institutional and staff development, learner support systems, and initiatives aimed at widening participation and promoting equity and redress. Earmarked funds may also be made available for the development of new programmes linked to ‘sunrise industries’, or meeting basic needs.

Increasingly, FET institutions should be expected to generate a proportion of their income. Accessing funding from companies in terms of SETA grants and from NSF envelopes will provide additional income. Colleges should be incentised to generate such income by reducing the level of state funding over time.

Currently student fees are the main source of additional college income. In the future FET provision will only be able to be improved and expanded on a cost-sharing basis. Thus user fees should constitute a proportion of the overall cost of a programme.

In the interest of equity, however, user fees must be related to the ability to pay. For this purpose a sliding scale for fees could be considered. This will involve means-testing of individual students/households or the identification of some proxy measure for socio-economic disadvantage. Where learners are assessed as able to pay, there must be a clear policy on the consequences of non-payment.

The work involved in designing the new funding framework is likely to be very labour-intensive and will involve commissioning both local and international consultants who have extensive work experience in this area. Funding as a national priority may be appropriate. The DoL has secured donor funding for this purpose. As in other areas of skills development close co-operation between the Department of Labour and the Department of Education will be required.
(b) **Efficiency Gains**

In 1997, the efficiency gains advocated in the 1997 MTEF will be essential to bring about more cost-effective skills development in a situation where most senior secondary schools and public colleges are grossly inefficient.

Before systemic reform can be undertaken to improve the quality, relevance and effectiveness of academic and technical/vocational courses, regulatory measures can be used to bring about efficiency gains through improved flow-through and output rates.

This could include regulations to limit the number of times learners can repeat grades/programmes or examinations in a public educational institution as is currently being investigated for public secondary schools. L:E ratios for colleges and incentives in this regard should be investigated.

In addition, targets should be set provincially to raise success rates by, say, 10 per cent in public institutions in 1999. Penalties for non-performance and closure in extreme cases should be investigated.

Rationalisation of institutions through provincial strategic plans, as is taking place in some provinces, is also required. This can include clustering according to focus but closure may in many cases be necessary to ensure effective utilisation of facilities.

Duplication of courses offered in technical colleges by youth colleges must be avoided. A better focus for Youth Colleges may be “second chance” secondary school courses and higher education access courses in scarce subject areas, such as those offered by the National Access Consortium. Whether Youth Colleges can effectively offer short vocational or entrepreneurial courses should also be examined.

The most serious constraint on cost-effective provision of quality technical/vocational courses is probably the shortage of technical/vocational trainers, and every effort must be made to deploy them optimally. Unfortunately, the current educator provisioning regulations hamper the employment of trainers without teaching qualifications and these should be re-examined.

(c) **Learnerships**

A key ingredient of the proposed framework for FET is that institutions should access funding in addition to that provided by provincial education departments. A case in point is learnerships, a modern form of apprenticeship that will be partly funded by the DoL from the National Skill Fund. As a result of the efforts of the social partners to prepare for the Job Summit, particular initiatives will be launched or accelerated, in the tourism industry in particular.

These initiatives will offer an incentive to technical colleges to undertake the institutional learning component of learnerships, in co-operation with industry, which will provide the on-the-job training element.

By applying for such learnerships and the subsidy attached to a learner for institutional training, colleges will begin to experience demand-side funding. In these cases some cross-funding issues between the DoE and DoL will have to be addressed. Powerful incentives should, however, be provided to colleges to enter into learnerships. These will have powerful knock-on effects in terms of the relevance and quality of their training.
The key issue in 1999 therefore is to encourage those colleges that are interested to respond to a new opportunity as a financially attractive learning experience for themselves, the college sector and the SDS as a whole.

Medium-term initiatives

The medium-term initiatives have a longer gestation period and in many cases depend on certain short-term initiatives. Thus they are envisaged for 2000 and 2001. Four different types of initiatives could be considered: systemic improvements in the quality, relevance and effectiveness of learning programmes in the FET band; an expenditure shift from academic FET programmes to more vocationally-oriented programmes; and the introduction of new demand-side and output-oriented funding mechanisms for FET institutions. These are discussed below.

(a) Improved Effectiveness, Relevance and Quality of Learning Programmes

Once rationalising existing institutions and programmes have effected key efficiency gains in 1999, attention should be given to improving the quality learning programmes so that they are more relevant to the world of work, job creation and higher education.

This work will divide logically into two main parts:

- improving existing learning programmes in senior secondary schools, which are largely academic in nature, to produce more integrated curricula which combine theory and practice; and
- improving technical/vocational programmes in public colleges.

A number of strategies can be used in the case of the latter and all of them require co-operation with industry. Key strategies will be programme development and evaluation, the introduction of good quality assurance mechanism, the development of learner support and guidance services, staff development programmes, and strategic upgrading of institutional infrastructure and equipment.

(b) Expenditure Shift from Academic to More Vocationally-oriented Programmes

In keeping with the Ministry's commitment in the White Paper on FET to provide a wider choice of relevant learning programmes for learners, an expenditure shift from academic to technical/vocational courses should be slowly introduced in 2000.

This could consist of two parts:

- Making available add-on programmatic funding for secondary schools that wish to introduce technical/vocational programmes. This will be based on the preparatory work done in 1999; and
- Expanding the provision of technical/vocational learning programmes at FET institutions (essentially the present public colleges).

Given the efficiency and effectiveness problems in most public colleges expansion should be limited to courses where proper evaluation have been done and improvements introduced. Considered and focused expansion is necessary because of large cost differences between technical education and ordinary school education.
but uncertainty about relative allocative efficiency. Participation of industry in expansion will be vital to ensure that courses are relevant to the workplace and to provide on-the-job training for learners.

(c) More Demand-side and Output-Oriented Funding for FET Institutions

After the preparatory work has been undertaken during 1999 on both the DoL’s levy-grant system and programmatic funding for FET institutions, it will be possible to begin introducing new funding mechanisms for the public colleges.

The necessary financial management capacities in the education departments and FET institutions will have to be developed, and only when an institution has demonstrated its capacity to manage its own budget and comply with the requirements of programmatic funding will budgetary authority and control be delegated to it. Prior evaluation of the capacity and planning in institutions will have to be done and piloting and a phased approach to introduction will be necessary.

The implementation of the DoL’s Skills Development Strategy in 2000 will make additional sources of demand-side funding available for public colleges through the levy-grant system. As already discussed, FET institutions will also be able to win the right to offer learnerships and attract the associated subsidy for the institutional training component. In addition to funding for learnerships, there will be funding available for the training of the unemployed, special projects, such as SDIs, and public works programmes from the National Skills Fund.

Furthermore, there will be other funds available to enterprising FET institutions. Loans for provider upgrading are likely to be available through the Manpower Development Fund and an innovation envelope in the NSF.

Access to these funds will demand success in a competitive bidding process. To the extent that public colleges have been sheltered from this type of competitive bidding process, there may be a case for designing mechanisms to initially provide them with opportunities to access these funds.

However, there is no doubt that FET institutions that are enterprising are likely to attract additional funds from the levy-grant system and the NSF that could greatly increase their ability to generate income for training. This should be borne in mind by the DoE and provincial education departments when the level of the public subsidy is set. Over time, as more FET institutions acquire the necessary competence, it will be possible to lower the level of the public subsidy to encourage them to generate additional income in this way.

6.4.2 Adult basic education and training (ABET)

In 1997, a National Multi-Year Implementation Plan for ABET was developed. Although the Plan was phased over four years, its goal of reaching some 2.5 million learners by 2001 was very ambitious. A detailed financial model and funding strategy was prepared for the four years of implementation that would involve a total learner enrolment and delivery cost of some R5.044 billion. Unfortunately, given the current financial constraint facing government, the Plan’s anticipated funding for ABET is very unlikely. Even the 1998 target of R1.272 billion has not been achieved in terms of state contributions and private, local and foreign donor sources.
Because the financial picture is unlikely to improve rapidly, ABET funding in the short- to medium-term will have to be scaled down to more realistic levels to achieve more modest objectives. This suggests that the objective for ABET funding in the 1998 MTEF should be to subsidise targeted and evaluated ABET programmes which are characterised by careful needs analysis, specific target groups, linkage to a key social or economic objective, and impact evaluation.

Research undertaken by government departments suggests that effective ABET takes place in an income-generating or work context or as a means to achieving an essential social objective. In other words, effective ABET for which there is a proven demand is instrumental to the attainment of an important social or economic end. Much of anticipated demand for ABET from illiterate adults does not materialise precisely because it is not relevant to their most pressing goals.

When the field has developed more understanding of how to provide effective, goal-driven ABET, it is more likely to be able to make its provision efficient so that it can be replicated on scale. At that stage, the Multi-Year Implementation Plan which is intended to provide ABET on a large scale could be re-examined.

6.5 Conclusion: expenditure recommendations

The information obtained on current skills development programmes at both FET and ABET levels, suggests that there is a need for a more integrated strategic, efficient and effective approach to skills development for young adults.

This is especially urgent in a context of financial constraints, limited options and very inefficient and ineffective provision of education and training for young adults, growing youth unemployment and high-level concern about skills development for youth within government and the social partners.

This could be accomplished firstly by provincial education departments undertaking a careful review of the different sectors of public FET providers and then developing a strategic plan for the skills development of young adults in the province that includes senior secondary schools, and technical/community/youth colleges. A start in this direction is the technical college audits initiated by provinces like Gauteng and Kwazulu-Natal.

Youth colleges, in particular, will benefit from being integrated into a provincial strategy which assigns them a clear purpose and the necessary resources.

The recommended policy direction for FET in the period 1999 - 2001 involves a careful phasing of short- and medium-term initiatives.

Key short-term initiatives include:

- Securing efficiency gains through regulatory measures and targets;
- Building information management and financial capacity;
- Promoting programme and unit standard/qualifications development;
- Designing the new funding framework for FET institutions; and
- Encouraging public colleges to enter into learnerships.

Medium-term initiatives should involve:

- Developing more relevant and effective FET programmes in co-operation with industry;
Shifting expenditure gradually from academic programmes to more vocationally-oriented ones;
- Introducing demand-side and output-oriented funding mechanisms for FET institutions;
- Encouraging FET institutions to generate their own income by winning company contracts and accessing NSF envelopes through competitive bidding processes; and
- Using dedicated funding (such as conditional grants or earmarked funds) to address national and provincial priorities in skills development for young adults.

In the case of ABET, the recommended policy direction is towards more affordable, instrumental, focused and output-oriented provision of ABET. Funding should be based on subsidies to public, private and NGO providers that identify a key socio-economic goal, target a specific group of learners, link the programme content to the socio-economic goal and measure the outputs/impact of the ABET programme.

Achieving these short- and medium-term goals will depend on more and better information, research and evaluation of FET and ABET.

Fortunately, in the case of skills development for young adults there are many possibilities for complementary funding from both the DoE and the DoL's Skills Development Strategy that should provide new incentives and result in more effective and efficient use of resources.
Chapter 7: The financing of higher education

7.1 Introduction

In Education White Paper 3: A Programme for the Transformation of Higher Education, it is emphasised that if the higher education system is to be transformed to redress past inequalities and to contribute to reconstruction and development, it must be planned, governed and funded as a single coordinated system (1997: §1.2).

The development of a “system-wide and institution-based planning process, and a responsive regulatory and funding system” are the key mechanisms identified in the White Paper as the basis for enabling the development of a single, coordinated higher education system. This process is critical to ensuring that the higher education system can “successfully address the legacy of the past, respond to national needs, link labour market opportunities and higher education outcomes, and provide a more predictable and stable funding environment” (§2.8). The emphasis on planning and the inter-related set of proposals contained in the White Paper on governance and funding, thus flow from the notion that the higher education system has to be:

- More accountable for the expenditure of public funds;
- More responsive to societal interests and needs; and
- Governed on the basis of co-operation and partnerships between the state, higher education institutions and civil society.

The planning framework and process outlined in the White Paper revolve around two key instruments: the development of a national higher education plan and institutional three-year “rolling” plans.

The primary purposes of planning at the national level is to ensure that the higher education system achieves the transformation objectives set out in the White Paper while recognising the need for coherence with regard to the provision of higher education at the national level; and that limited resources are used efficiently and effectively. The national plan will establish indicative targets for the size and shape of the system, overall growth and participation rates, including equity targets, and institutional and programme mixes.

At the institutional level, the purposes of planning is to ensure that individual institutions achieve their objectives and that they contribute to the achievement of national goals and priorities. The institutional plans will be developed within the framework of the national plan and their approval will be the trigger for funding of higher education institutions. The institutional plans will include indicative targets for enrolment levels by programme, race and gender equity goals and plans for new programmes, academic development, research development and infrastructural development.

In addition, a key priority at the institutional level will be to develop the necessary mechanisms to ensure quality assurance and improvement. Although the primary responsibility for quality assurance rests with institutions, the Higher Education Quality

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7 This Chapter has been written by the national Department of Education, and is not the work of the MTEF sectoral team.
Committee (HEQC), a permanent committee of the Council on Higher Education (CHE) will have overall system-wide responsibility for quality assurance and promotion.

The planning framework will be complemented by and linked to a new funding framework which, as the White Paper states, will be goal-oriented and performance-related. It will have two main elements:

- A simplified mechanism for allocating general purpose, block funding to institutions on a rolling triennial basis; and
- The provision of earmarked funds to achieve specific purposes, including targeted redress of inequities in access and capacity, student financial assistance, staff development, curriculum development, research development, libraries and information technology, capital works and equipment, and planned improvements in operational efficiency.

Block funds will be allocated to institutions on the basis of their planned (full-time equivalent or FTE) enrolments in different fields and levels of study in relation to their institutional mission and plans. This will enable the Ministry, in the context of the MTEF, to indicate to institutions the level of their block grant three-years in advance, thus introducing predictability and stability into the planning process. In determining and negotiating the block grants for different fields and levels of study, the Ministry will take account of available student demand estimates and long-range labour market signals on the one hand, and institutional capacity and performance on the other.

The planning and funding framework outlined above will be phased in over a five-year period beginning in 1999. It is anticipated that the full framework will be operational by the year 2001. In the case of the planning framework, the first phase has already begun and institutions have submitted their first three-year rolling plans for 1999-2001. This phase will be primarily a preparatory one in which institutions, the Department of Education and the Council on Higher Education (CHE) gather planning information and begin developing the capacities required for the full planning framework. The Department will, during this first phase, also develop the national higher education management information system and new mechanisms and formulae for funding.

In the first phase, while the necessary research and development work is underway, there will be no comprehensive national higher education plan. Instead, the Department will set annual policy directives that will be derived from the transformation goals as set out in the White Paper. In this respect, the Department has requested institutions in preparing their first three-year rolling plans to focus on the following policy priorities:

(a) **Size and shape of the system:** Institutions will be expected to outline how they are addressing national priorities in relation to:

- Participation rates for the relevant age-groups by gender and population group;
- Proportions of undergraduate and postgraduate student enrolments;
- Proportions of student enrolments in each broad field of study;
- The expansion of student enrolments in science, engineering and technology programmes;
- Proportions of distance and contact education student enrolments; and
- The expansion of short-cycle teaching programmes.

(b) **Equity:** Institutions will be expected to identify and outline their strategies for addressing the student and staff equity goals outlined in the White Paper.
(c) Efficiency: In line with the view stated in the White Paper that the internal efficiency of the higher education system can be improved, institutions will be expected to show how they intend achieving efficiency improvements through:

- Reducing unit costs and in particular those related to administrative overheads;
- Reducing overlap and duplication in academic programmes;
- Broadening the use of innovative education delivery modes; and in particular those which are not labour intensive; and
- Enhancing student success and throughput rates;

(d) Inter-institutional co-operation: In line with the view stated in the White Paper, that inter-institutional co-operation could eliminate unnecessary duplications in academic and administrative service provision, institutions will be expected to identify what steps are in place to increase co-operation with other higher education institutions in the same region, in relation to:

- Sharing human and physical resources;
- Joint academic programmes; and
- Joint research programmes.

In the case of the funding framework, the new funding formula based on a funding grid for subsidised student places will be introduced in a phased manner from the 2000-2001 financial year. In the 1999-2000 financial year, institutions will be funded in accordance with the provisions of the current subsidy formula. In 2000-2001, i.e. when the new funding formula is introduced, institutions will receive subsidy amounts which take account both of what they would have received if the current formula were still in operation and of what they would receive from the grid of subsidised student places. As a transitional measure, care will be taken to ensure that the subsidy amounts institutions receive in the year 2000 do not deviate substantially from what they would have received in terms of the current formula.

7.2 Current funding of universities and technikons

Table 18 shows the proposed funding of universities and technikons for 1999/2000-2001/02, using the current funding formula. In determining the budget proposal for 1999/2000, a funding level of 65% is used, which is the same level as for 1998/99. A projected growth rate of 4.3% and 5.9% was used for the number of subsidised university and technikon students, respectively. The subsidy for 1999/2000 includes R245 million for the carry-through effect of the improvement in the conditions of service implemented during 1998. This amount is included in the subsidy because universities and technikons have no claim against the vote on improvements in conditions of service. Salary increases for 1999/2000 are projected at 6.2%.

<table>
<thead>
<tr>
<th>Table 7.1 Proposed funding of universities and technikons, 1999/00 - 2001/02 (R m)</th>
<th>1998/99 (Budget)</th>
<th>1999/2000</th>
<th>2000/01</th>
<th>2001/02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidy amount at 65% funding level</td>
<td>5 309</td>
<td>5 944</td>
<td>6 622</td>
<td>7 326</td>
</tr>
<tr>
<td>Ad hoc amount (excl. funds for new buildings)</td>
<td>354</td>
<td>352</td>
<td>352</td>
<td>352</td>
</tr>
<tr>
<td>Ad hoc amount for new buildings</td>
<td>13</td>
<td>63</td>
<td>163</td>
<td>163</td>
</tr>
<tr>
<td>Redress Funds</td>
<td>28</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>NSFAS</td>
<td>300</td>
<td>400</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Total</td>
<td>6 003</td>
<td>6 859</td>
<td>7 737</td>
<td>8 501</td>
</tr>
</tbody>
</table>
The same assumptions for funding level and growth rates were used for the following two fiscal years. For 2000/01 a 6.2% salary improvement was assumed to include an amount of R272 million for improvement in conditions of service. For the 2001/02 a figure of R302 million has been included for improvements in conditions of service.

Personnel-related cost units in the funding formula were increased by 6.2% in all three years, in accordance with the 6.2% projected increase in improvements in conditions of service.

7.3 Issues in the funding of higher education

Under the present system of funding, and given the present fiscal climate and funding levels, the following problems have been identified:

- The declining subsidy levels for universities and technikons in the past decade coupled with large amounts of still outstanding tuition and hostel fees for previous years, and the fact that many institutions cannot secure private sector funds, has brought some institutions to a point of severe crisis. A few institutions’ current expenditure is at present being financed by means of bank overdrafts. Should funding levels fall below 65% for 1999/2000 financial year many more institutions could be similarly affected.

- Financial stress contributes to student unrest on many of our campuses Many students are frustrated by their inability to pay tuition and residence fees. Although the steady increase in the NSFAS allocations – R200 million in 1997/98 and R300 million in 1998/99 is to be welcomed, it is inadequate in relation to needs. A recent study commissioned by the Department indicates on the basis of different growth and need scenarios, on average between 1998 and 2010, between R348 million and just under R600 million is need per annum. This excluded the additional resources that will be needed when colleges that offer higher education programmes are incorporated into the higher education system.

- As a result of lower levels of funding, as well as the substantial growth in student numbers over the last number of years, serious shortages of physical facilities have developed at certain universities and technikons. Institutions are under severe pressure by student communities to build additional lecture halls, support facilities and hostels to alleviate overcrowding on many campuses. Funding for new buildings for universities and technikons has been severely restricted in recent years. Furthermore, in the long term, the utility and viability of existing facilities are in danger as institutions have not been able to undertake normal renovations and maintenance.

- The university and technikon sector continues to suffer the effects of the apartheid past. Institutional redress is urgently needed in order to steer higher education in the direction set out in the White Paper. The need for institutional redress has been accepted and as a first step, R 27 million was allocated for redress in the 1998/99 budget. Furthermore, in terms of current MTEF projections, it is anticipated the R 100 million will be allocated in the 1999/2000 and 2000/2001 fiscal years. The allocation of the redress funds will be based on identified needs and the performance improvement plans of institutions, thus ensuring that the funds are targeted in the context of the broader planning framework outlined above.

In terms of the constitutional provision that tertiary education is a national competence (Schedule 4), all colleges such as colleges of education, nursing, agriculture, etc. which offer post-secondary programmes are a national competence, under the jurisdiction of the
Ministry of Education. They will have to be planned, governed and funded as part of the single co-ordinated higher education system.

These colleges were previously a provincial responsibility and currently continue to be administered at the provincial level by different line departments. Their transfer to the national level would therefore have to be transacted with the relevant provincial and national ministries.

The Department has prioritised the incorporation of colleges of education as they fall within the education budget vote. In this regard, the Department has released an implementation framework for the incorporation of colleges of education into the higher education system. To give effect to this, the Department via HEDCOM, has established a Transition Committee (TC) which is charged with initiating the investigations and processes necessary to facilitate the transfer of colleges of education to the national level with effect from the 1999/2000 financial year. In this regard, the TC has prioritised the identification of the budgetary implications (including the costs of incorporation) and the transfer of the college of education budgets, including student financial aid, from the provincial to the national budget vote.

7.4 Future funding patterns

It is clear that there are severe pressures on higher education funding. Although the White Paper assumes that such pressure will remain for the foreseeable future, it argues that there is a good case for maintaining the current levels of public expenditure on higher education as a proportion of GDP, on the grounds that in the context of the current economic growth projections, this would represent a significant real expenditure increase.
Chapter 8: Conclusion

Five major sets of conclusions are drawn from this work. Firstly, a research agenda is presented, covering a number of issues on which work to inform future policy debate in education. Secondly, a package of policy, budgetary and personnel measures are recommended in order to stabilise provincial education funding while increasing non-personnel expenditure. Thirdly, the report makes a number of recommendations on issues that are either new or solutions that have not been raised before. Fourthly, it is recommended that a permanent ‘4 by 4’ structure be established to continue on an ongoing basis the productive professional relationship that has developed during the 1997 and 1998 MTEF processes. Finally, it is proposed that the question of backlogs and the financing of capital programmes in education receive the priority attention of the ‘4 by 4’ structure. These recommendations are elaborated upon in the following sections.

Issues that were touched upon in the report, but are currently being discussed or are in the process of being implemented are not dealt with in this conclusion unless a new focus or new impetus is required.

8.1 Research Issues

This report, which was compiled over only two months, attempts to cost various policy options in order to present decision-makers with clear choices for its medium term spending plans. It has been possible to summarise various current policy initiatives as well as some of the research that has been done in the sector over the past year. The difficulty is that there has not been enough time for detailed research on issues that arise in the policy arena. It would be beneficial to future MTEF work if a number of research projects can be initiated as soon as possible.

The Department of Education has decided to establish a directorate for education policy support. Besides supporting the National department, this directorate will also assist provinces to improve their policy capacity. The MTEF sectoral team welcomes this initiative. From an MTEF point of view, it is important that this unit have sufficient capacity in the area of education economics, budgeting and planning, financial management and statistics.

Policy formulation is the domain of the line department. A well-functioning policy support unit will be important to equip the Department of Education adequately for the challenges that face the sector in the next few years. The MTEF is joint exercise between the Departments of Education and Finance to cost these policy options and present decision-makers with clear choices for expenditure planning. If the unit functions well, it will greatly facilitate future MTEF work. Detailed research can be identified and conducted by this unit with the view of informing the long-term policy framework of the department and government in general. The MTEF sectoral team will then be able to propose much more detailed and better-researched policies than currently on the table.

This report recommends that this policy directorate begin its work on a number of specific areas that this report has raised.

8.1.1 Pay scales and incentive schemes

In theory, South Africa would like a core of teachers that are well paid, highly qualified, motivated and constantly improving the quality of teaching in the classroom. We would like teachers to play a broader role in the development of the child through extra-curricular activities, community involvement and constant interaction with parents and stakeholders in
the school environment. We need a system where good teachers are rewarded and poor teachers are weeded out of the system. We need a system that encourages bright young minds to enter the teaching fraternity, enhance their skills and remain within the education system in order to contribute their wisdom and experience to the education system. In short, we need to bring in good teachers, ensure that they deliver quality education, and hold on to them as long as possible.

Defining what a good teacher is, should be the subject of research and debate within society. Devising a system that brings in the bright young minds that the system needs and keeps the best ones requires a system of rewards, incentives and disincentives. What type of system will fit these criteria? What do we want the teaching core to look like in the long term? Will improved qualifications lead to better teaching or is it simply a paper chase for more money?

In most developed countries, pay scales for young, newly qualified teachers are lower than salaries in other industries for people of similar age and qualifications. As they get older, the system rewards their experience and loyalty by making it very lucrative for them to remain in the system. In South Africa, it has become very lucrative for a young person to enter the teaching corps, but this relative incentive diminishes over time. As a result, it becomes difficult to retain experienced teachers. What system should we adopt to keep our best teachers and make the profession attractive to young people?

To complicate the picture, experience does not always result in better performance. What system can be put in place that rewards individual teachers who perform well while making it difficult for those who don’t to progress up the ladder? What set of definitions and processes can be put in place for society to define a good teacher or good teaching? How can we reward teachers who take part in extra-curricular activities and get involved in the educational community at the school level? How do we encourage teachers to develop a relationship with parents?

These are complex questions that require detailed research over an extended period of time. This research is required to define the long-term policy priorities for personnel planning and education expenditure. We propose that this area of research receive top priority within the education sector. The Department of Education should lead such a research project using its own research capacity or those of outside agencies such as universities or NGOs’. There is a considerable body of work at the international level on these topics. It is important that we use this research to inform our own peculiar set of circumstances and provide our decision-makers with clear options for the future.

8.1.2 ‘What works’ in Education?

The long list of questions in the section above raise questions about what type of a system would lead to better outcomes in the education sector and improved economic and social performance in the long term. The list of questions above mainly relates to personnel policies and the framework around personnel. There are other issues that contribute to educational outcomes, which we know very little about. The questions that are most urgent are:

- What type of teacher education would lead to better outcomes?
- What systems for ongoing professional development or INSET are appropriate for our education system?
- What type of non-personnel expenditure is required at the school level?
- What level of non-personnel expenditure is appropriate?
- What type of schools would lead to a better teaching and learning environment?
- How can we decrease the costs of learner-support materials?
How can extra-curricular activities contribute towards a healthy society?
How can community involvement be managed to produce better outcomes at the school level?

These are just some of the questions that arise when one looks at the requirements of an integrated education system. These issues might not all have direct budgetary implications but they do impact on quality of education and the return on investment that society makes towards education. Research in these areas will contribute towards a broader look at educational policy issues than currently exists.

8.1.3 Relationship between human development and economic growth

Currently South Africa has a sophisticated economy, which is characterised by high salaries and a serious shortage of skilled labour, but also, the majority of South Africans are under-skilled, and unemployment and poverty are high in both urban and rural areas. A key determinant of social or economic success is the ability of the education system to produce a high quality workforce that can adapt to a changing environment.

This sectoral team recommends that the Department of Education initiate a research project that looks specifically at the link between human development, particularly in education and training, and economic growth. As pointed out earlier, as a nation, our single largest investment is in education. Is that investment assisting us in developing an economy that is growing rapidly while at the same time creating opportunities for all South Africans?

8.1.4 Public/private partnerships

Many areas of government are looking towards partnerships with the private sector to improve service delivery and lower costs for the public sector. Most aspects of education can be defined as public goods but there are aspects where this categorisation begins to overlap with private goods. Research is required on the advantages and disadvantages of increasing cooperation between the public and private sector in the delivery of education. We currently have a user fee system in public schools. Is there room to introduce competition and private sector management techniques in order to improve efficiency in education and enhance teaching quality?

The education production process can be unbundled to allow private sector involvement in selected aspects of service delivery. The examinations system is an example of a service that can be outsourced to the private sector. These issues should be investigated in detail by the education department with a view of improving efficiency and effectiveness while ensuring equity in service delivery and opportunity.

8.1.5 Data requirements

To feed the policy and research process, a reliable set of data is required. The Department of Education is in the process of completing the establishment of its Education Management Information System (EMIS). This notwithstanding, there is a need for a more detailed look at what the long-term data requirements of the education system are, to monitor the outputs and outcomes from the education system.

The long-term vision of the Dept. of Education is to move towards a system that can closely monitor the performance of schools, teachers, managers, districts, regions and provinces. Research is required on the type of indicators that will be appropriate for South Africa, methods of monitoring and evaluation procedures for the education system.
8.2 An integrated solution for the education sector

The problems in the education sector are complex set of issues that need to be tackled with a package of policies or solutions that aim to improve the quality of education by bolstering education management, providing certainty in the labour market, increasing non-personnel expenditure and stabilising provincial education budgets.

In order to address the lack of financial and educational credibility of in provincial budgets, particularly in relation to the imbalance between personnel and non-personnel expenditure, a preferred policy package (‘Option E’) was outlined in Chapter 4. To summarise the package:

- Provincial education budgets will grow by about 1% per year from the 1999/2000 fiscal year to the 2004/2005 fiscal year.
- Personnel expenditure would decline by approximately 0.4% a year in real terms throughout the period. This would entail giving educators salary increases of 1% below the inflation rate.
- Savings from reductions in personnel costs and growth in the education budgets will be spent on non-personnel items in the budget. This will mean that non-personnel expenditure would increase from 9% of the education budget to 15% of the education budget.
- Some provinces would be able to achieve the 15% benchmark with real budget growth rates of less than 1%.
- There will be no retrenchment of teachers during the period. Provincial education departments will still be expected to achieve equity through redeployment and differential rates of hiring.
- Through natural attrition, the education system loses around 9000 teachers a year. Provincial education departments will still be able to employ about 6000 teachers per annum.
- Average L:E ratios will increase from 34 to 37 during the period.

In order for option E to yield the results desired, the following also needs to happen:

- Appraisal systems and job descriptions will be introduced in line with negotiated agreements.
- Teacher workload and working hours will increase in line with newly negotiated agreements.
- Teacher support systems will be improved at a provincial and district level in order to improve the quality of education in the classroom.
- Education management at all levels will be improved to enhance productivity and quality in all aspects of education delivery.
- A concerted effort to improve the culture of learner, teaching and service in the education system by integrating the COLTS campaign with routine management procedures down to school level.

It should be noted that the above figures are calculated on a national basis. The specific configuration will vary from one province to the net. Please see the Appendix on the provincial

In policy terms, the package distributes the burden of adjustment among all the policy variables. Each adjustment should be attainable over the period of the projections, but it will clearly require sustained and co-ordinated effort on the part of the entire sector to ensure that the targets are achieved.
Because the burden of adjustment is distributed across all the variables, the package has benefits for all stakeholders. Learners should begin to see the benefits of better school discipline, and more support materials and textbooks. The National and provincial governments will benefit from better-structured education budgets that provide resources for textbooks, learner support materials, and capital improvements. Although teachers suffer a decline in real incomes, they have the certainty that no retrenchments need occur. The sector as a whole has a stable environment within which to focus on educational quality.

These proposals are attempt to provide the education sector with a framework to build an education system that is more effective, efficient and equitable. Ultimately, political decisions will need to be taken in a number of different provincial and national fora, and also in bargaining chambers, to implement (or otherwise) different components of the package. The package also requires sustained and effective action from education managers and educators. Finally, although the package shows the way to a viable solution, it will undoubtedly need further development and refinement in the course of its implementation.

8.3 Other specific recommendations

8.3.1 Initiatives currently underway

The question of the lack of efficiency in general and the lack of classroom productivity in particular are being addressed by means of a number of processes already underway. The following are goals of initiatives that are currently in the process of discussion and negotiation:

- Increased work effort in the classroom;
- Improved educational support for teachers and schools;
- Measures to evaluate performance in the education system;
- Involvement of parents in holding schools accountable for results;
- Improved school management;
- Improved district and head office management;
- Improved information capacity and information flow in the system;
- More diversified subject choices at the further education level;
- Use of the SA Schools Act to achieve equity in the distribution of resources down to school level.

8.3.2 Enquiry into cost effectiveness of the examination system

It would be valuable to conduct an investigation into the examination system, its cost-effectiveness, and possible modifications to improve efficiency. Various options including outsourcing should be considered.

8.3.3 Education conditional grant

Projects initiated under the educational conditional grant should be implemented fully. Care should be taken to avoid negative budget implications arising from the unfortunate late start of the programme.

8.3.4 Further Education & Training

In the field of FET, the reviews of the sub-sectors and resulting integration of service provision that are continuing in some provinces should be extended to other provinces.

Key short-term initiatives in the FET sector include:
Securing efficiency gains through regulatory measures and targets;
Building information management and financial capacity;
Promoting programme and unit standard/qualifications development;
Designing the new funding framework for FET institutions; and
Encouraging public colleges to enter into learnerships.

Medium-term FET initiatives should involve:

- Developing more relevant and effective FET programmes in co-operation with industry;
- Shifting expenditure gradually from academic programmes to more vocationally-oriented ones;
- Introducing demand-side and output-oriented funding mechanisms for FET institutions;
- Encouraging FET institutions to generate their own income by winning company contracts and accessing NSF envelopes through competitive bidding processes; and
- Using conditional grants and/or earmarked funds to address national/provincial priorities in skills development for young adults.

8.3.5 Adult Basic Education & Training

In the case of ABET, the recommended policy direction is towards a more affordable, instrumental, focused and output-oriented provision of ABET. Funding should be based on subsidies to public, private and NGO providers that identify a key socio-economic goal, target a specific group of learners, link the programme content to the socio-economic goal and measure the outputs/impact of the ABET programme. Achieving these short- and medium-term goals will depend on more and better information, research and evaluation of FET and ABET.

8.3.6 Establishment of a Finance/Education ‘4 x 4’

It is clear to those involved in the MTEF processes for 1997 and 1998 that there are considerable benefits to be derived from the professional collaboration that has developed. However, the short time period allocated to the work of the teams has limitations. In common with other sectoral teams, therefore, the Education Team recommends that a permanent joint structure of Finance and Education be established, possibly with a ‘4 by 4’ format, to develop the MTEF work programme on an ongoing basis.

8.3.7 ‘4 x 4’ to take up the question of financing capital backlogs

One important area to which the Expenditure Review Team was unable to give adequate attention was the question of capital financing and backlogs. Although work on this has been continuing outside the ambit of the Expenditure Review Team process, it is clear that a concerted effort is required on the issue. It is therefore recommended that the proposed Finance/Education ‘4 by 4’ prioritise this issue in its programme of work.
Appendix: Provincial implementation of the proposals

Introduction

The logic of the preferred personnel policy option outlined in Chapter 4 has been described from the perspective of the country as a whole. However, provincial variables vary widely in the education system. Average salary costs, number of teachers, post composition, wage drift, qualification structure and overall level of funding are different for each of the provinces. This short note will shed some light on the implications for provinces of implementing the recommended package.

Table 1: Results of provincial modeling of policy proposals

<table>
<thead>
<tr>
<th>Province</th>
<th>Learner : Educator ratio</th>
<th>Annual change in educator requirements</th>
<th>Real annual growth in budget required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>35</td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td>Free State</td>
<td>33</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Gauteng</td>
<td>31</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>37</td>
<td>38</td>
<td>39</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>35</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>28</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Northern Province</td>
<td>34</td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td>North West</td>
<td>32</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>Western Cape</td>
<td>33</td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td>National</td>
<td>34</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

Note: The National line is calculated independently, and does not necessarily reflect the sum of the provinces.

The above table is based on a model that takes the 1998/99 education budgets, the costs of current provincial wage drift, a nationally negotiated agreement to decrease the average cost of each post by 1% in real terms over a five year period, and calculates the required real budget growth in each province to achieve a minimum of 15% expenditure on non-personnel items. The model assumes an inflation rate for the next five years and produces guidelines for each province on the number of teachers that it could hire annually.

It may be worth re-iterating why the proposals have been formulated in this manner. There is no doubt that the current imbalance between personnel and no-personnel spending in school education is a crisis. The international median in comparable middle income countries is that around 20% of education spending is allocated to non-personnel costs. The education sector is adopted this ratio as a target, without specifying a date by which it might be achieved. Table 2 sets out the ratios actually achieved over the past three years, and the ratio indicated in the 1998/9 budgets. Note that once funds for improvements of conditions of service have been included for 1998/9, these fractions will drop several extra percent. The 15% target used in these proposals is regarded as an intermediate goal that it is absolutely essential to achieve in order to address the crisis.

There are a number of factors that influence the level of budget growth that each province would require in order to achieve the 15% benchmark. Assuming, wages are agreed upon nationally, differential wage drift due to additional promotion posts and increased salaries due to higher qualifications builds into the system an upward pressure on wages without any specific policy or management action. It must be noted that wage drift, which is a major factor in these calculations, is calculated using PERSAL figures from April 1997 and July...
1998. There is no guarantee that this period will serve as a good proxy for the behavior of the education system between 1999 and 2004.

Table 2: Fraction of provincial education budgets spent on non-personnel items

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>9%</td>
<td>15%</td>
<td>14%</td>
<td>7%</td>
</tr>
<tr>
<td>Free State</td>
<td>10%</td>
<td>14%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Gauteng</td>
<td>16%</td>
<td>14%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>19%</td>
<td>15%</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>13%</td>
<td>14%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>31%</td>
<td>14%</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>Northern Province</td>
<td>11%</td>
<td>12%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>North West</td>
<td>17%</td>
<td>15%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Western Cape</td>
<td>12%</td>
<td>12%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>All provinces</td>
<td>14%</td>
<td>14%</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: Dept of Finance (derived from Table 3.1)

Budgetary implications

Table 1 indicates the required real annual budgetary growth for Education for each province up to 2004/2005. To begin, the table shows that three provinces; viz. Gauteng, Western Cape and the Northern Cape; do not require any real budgetary growth in order to achieve the 15% level for non-personnel expenditure. In essence, the wage agreement on its own will allow them to manage down the personnel expenditure to below the 85% level. They would, however, have to manage the hiring of new teachers carefully. That is, they will not be able to replace every teacher that leaves the system. They would be able to use attrition to allow their L:E ratio to drift upwards. The hiring of new teachers would clearly be done by taking equity issues into account.

Any real growth in the budget that is given to education will be entirely a matter of provincial priority-setting. For these provinces, additional growth will increase their non-personnel expenditure to beyond the 15% level, or will provide resources to reduce class sizes by hiring additional teachers. Another area to which any additional resources can be channeled is capital improvements.

The next group of provinces is the Free State and the Northern Province. Wage drift in these provinces is relatively low. Hence, the wage agreement decreases their personnel costs significantly. With a small real growth in the education budget, these provinces can achieve the 15% benchmark. Both the Free State and the Northern Province require real annual growth of 0.4%. These two provinces need to grow by a rate lower than the national average that the Education sectoral report recommends. Both these provinces have negative wage drift in terms of promotion posts. This means that very few additional promotion posts have been created while more promotion posts have been vacated due to natural attrition. These provinces still need to control the granting of promotion posts. An increase in promotion posts will result in higher budgetary growth requirements in order to achieve the 15% benchmark.

Kwazulu-Natal, the Eastern Cape, Mpumalanga and the North West province have very high levels of wage drift due both to promotion posts being created and improved REQV levels. The wage agreement will not make as much difference to their personnel costs as in the other provinces. These provinces require budget growth in excess of the 1% outlined in the report. Kwazulu-Natal requires real growth of 1.4%, whereas North West Province
Mpumalanga and the Eastern Cape require growth of 1.2%. This level of growth is higher than the projected growth rate of provincial budgets as outlined in the 1998/99 budget review.

These provinces, particularly North West and Mpumalanga, will have to put stricter controls in place on the granting of promotion posts. There is also a need for thorough checks and closer scrutiny of certificates when teachers apply for a higher salary level due to improved qualifications.

With a combination of real budget growth and a decrease in wage drift, these provinces too can achieve the 15% benchmark.

**Learner: Educator ratios**

The proposals are that the average L:E ratio drift up from 34 to 37. There are a number of factors that influence the provincial implementation of this goal. Firstly, the current L:E ratio is the base from which the policy must be implemented. Secondly, it is difficult to calculate how the proposed increase in workload will be phased in. Different provinces will begin with different workloads, and the rate at which this can realistically increase will affect the final L:E ratio. The following calculation is based on the assumption that all provinces will move towards the workloads indicated in the personnel chapter by 2005. A third factor which will affect the final L:E ratio is the speed at which provinces can decrease their teacher substitution rate. These calculations assume that the national level of teacher substitution can decrease from 5.8% to about 3.8%. Some provinces are already below this average. These provinces will need to maintain their level of teacher substitutions at their present level.

Although some provinces would allow their L:E ratios to drift upwards, increases in teacher workload would actually decrease average class sizes.

These figures require more work before they can be finalised. The actual budgets allocated, as well as managerial capacity, will determine how these numbers will be phased in. It must also be pointed out that, even if the budgets are to grow in real terms as pointed out above, and:

- Pass rates do not improve;
- Teacher substitution does not decrease; and
- Workload does not increase

Then the L:E ratio is likely to be as high as 40 with some provinces having L:E ratios as high as 42 or 43.

The fact that the proposals do imply higher L:E ratios and therefore larger class sizes is not regarded as educationally ideal. However, improved provision of textbooks and other learner and teacher support materials will become possible, and this should make it possible to achieve better educational outcomes than are possible under current circumstances, despite the increase in class sizes.

**The proposals in respect of wages**

The proposals in Chapter 4 call for wages to be decreased by about 5% in real terms over the five-year period. The model phases this decrease in with equal adjustments over the period. This is not the only way in which these decreases can be effected. The model produces similar end-results if wages were decreased by 2.5% per year over two years and then zero real increases over the remaining period, depending on the level of economic
growth. This may be easier to implement than a long period of sustained decreases in wages.

**Implementing the proposals**

The Sectoral Review Team feels that there may be value in arranging for appropriately constituted task teams to visit selected provinces to further examine the implications of these proposals. The teams would further develop the proposals for the provinces concerned, taking into account the state of funding, financial management, and educational need. This could only be done with the full consent of the provinces concerned. It is recommended that the proposed Finance/Education ‘4 by 4’ team take up this issue.
1988 MTEF Education Sectoral Review Team

<table>
<thead>
<tr>
<th>Name</th>
<th>National / Provincial</th>
<th>Department</th>
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<tbody>
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<td>Eastern Cape</td>
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<td>Ms J de Bruin</td>
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<td>Financial &amp; Fiscal Commission</td>
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