National Treasury

and

Department of Education

PFMA planning and reporting requirements

for

Provincial Education Departments

"The Manual"

16 February 2006

CONTENTS

FIGURES

TABLES

GLOSSARY OF TERMS

The definitions attached to particular terms *in this document* are provided below. These definitions may differ slightly from definitions employed in other Government planning contexts, for instance that of the Provincial Governments in general or that of another sector at the national level, e.g. health.

Annual Performance Plan (APP)	The Annual Performance Plan is produced annually by each Provincial Education Department, according to a national format. It outlines actions to be taken in the next financial year, as well as the following two years, to achieve the education goals and objectives of the province and the country. It includes substantial amounts of analysis that feed into the plans.
Measurable objective (MO)	Measurable objectives are objectives where attainment can be relatively easily measured. Their focus is largely on fairly universal measures of access, adequacy, equity, efficiency, output and quality. They complement the strategic objectives. Most measurable objectives are linked to one provincial budget programme, though some may be generic to the sector as a whole.
Performance measure (PM)	Performance measures are national indicators linked to specific statistics. They are used to gauge performance in the education system. Each performance measure is linked to one measurable objective. Each performance measure takes the form of one provincial time series statistic.
Performance target (PT)	A performance target is one numerical value for one future period in time with respect to a performance measure. Performance targets indicate in a precise manner the improvements that are envisaged in the education system.
Strategic goal (SG)	Strategic goals are goals that determine the overall medium to long-term direction of the pre-tertiary education system. They reside at the top of the hierarchy of planning elements.
Strategic objective (SO)	Strategic objectives are one level below the strategic goals. Their focus is more specific than that of the strategic goals. Most strategic objectives are linked to one provincial budget programme, though some may be generic to the sector as a whole.

ACRONYMS

NGO	Non-government organisation
PED	Provincial Education Department
DoE	Department of Education
MTEF	Medium term expenditure framework
APP	Annual Performance Plan
PFMA	Public Finance Management Act
MDG	Millennium Development Goals
EFA	Education for All
NEPA	National Education Policy Act

1 CONCEPTUAL FRAMEWORK AND BACKGROUND

1.1 What is performance-based government?

1.2 The PFMA planning and reporting cycles

This section sets out an over arching framework that explains the links between planning, budgeting and reporting for provincial departments and the relationship between the different documents that provincial departments are expected to produce in relation to each of these processes.

The critical challenge facing all provincial departments is to ensure that strategic planning is developed and synchronised with the entire planning, budgeting, monitoring and reporting framework that the PFMA seeks to put in place. Another challenge is to ensure that the provincial department's plans are formulated within the top-down frameworks set by overarching national and sectoral plans, the individual province's own position statements or plans, as well as the bottom-up information coming from district offices, and the Integrated Development Plans (IDPs) developed by local government.

1.2.1 The electoral cycle

Every five years the citizens of South Africa vote in national and provincial elections in order to choose the political party they want to govern the country or the province for the next five years. In essence the voters give the winning political party a mandate to implement over the next five years the policies and plans it spelt out in its election manifesto.

Following such elections the majority party (or majority coalition) in the National Assembly elects a President, who then selects a new Cabinet. The President and the Cabinet have the responsibility (mandate) of implementing the majority party's election manifesto nationally. While at the provincial sphere, the majority party (or majority coalition) in each provincial legislature elects a Premier, who selects a new Executive Committee. The Premier and the Executive Committee have the responsibility (mandate) of implementing the majority party's election manifesto within the province.

To facilitate the translation of the governing party's election manifesto into national/provincial government policy and plans it is desirable that the strategic planning process within government be synchronised with the electoral cycle. Such a link would enable the incoming President and Cabinet (or Premier and Executive Committee) to ensure that the strategic direction and actions of government over the next five years are aimed at implementing the policies and plans necessary to give effect to the electoral mandate.

It is obviously not possible to synchronise the two processes exactly. However, the aim should be to ensure that the next planning cycle after an election reflects the policies and plans of the new government.

1.2.2 National, provincial and local government planning frameworks

Overarching national planning frameworks

Parliament appoints the President with a mandate to implement the governing party's election manifesto. The President appoints a Cabinet to assist in this task. Together the President and the Cabinet draw up a Medium Term Strategic Framework (MTSF) aimed at translating the election manifesto into a programme of action for the government's term of office. Progress with implementing the MTSF is reviewed each year, and the President uses the 'State of the Nation Address' at the beginning of each year to articulate new priorities and policies emerging from such reviews. In addition the Presidency has developed a National Spatial Development Perspective document to guide spatial development initiatives nationally.

Another very important set of national planning frameworks are those relating to the Budget, namely the Medium Term Expenditure Framework (MTEF) and the Annual Fiscal Framework that informs budget decisions in the current year. While it is acknowledged that planning needs to inform the allocation of budgets, the plans themselves need to be developed taking the overall availability of resources into account. There is thus a necessary interaction between strategic planning and budgeting.

Overarching provincial planning frameworks

Similarly, the each provincial legislature appoints a Premier with a mandate to implement the governing party's (or coalition's) election manifesto. The Premier appoints an Executive Committee to assist. Together the Premier and his/her Executive Committee develop a provincial growth and development strategy aimed at translating the election manifesto into a programme of action for the provincial government.

Sectoral planning frameworks

Within nearly every sector the relevant national Minister can be expected to put in place a set of strategic goals and objectives for service delivery in that sector. These objectives should be developed in consultation with provincial MEC's and with provincial departments, and should therefore be in line with the overarching national and provincial plans. A current example of such a set of sectoral goals is the 'Tirisano Priorities' drawn up by the National Education Department for the education sector.

Local government 'Integrated Development Plans'

Probably the greatest challenge for provincial departments is to ensure that their strategic planning processes are increasingly informed by and linked to the Integrated Development Plans (IDPs) that local governments are required to produce.

1.3 Planning terminology

It is vitally important that the various organs of Government should adhere to a standard set of planning terms. The definitions in this sub-section reflect a Government-wide terminology, though some specifications regarding usage may be education-specific.

1.3.1 Strategic goal (SG)

During the 2004 formulation of five-year strategic plans by all PEDs, strategic goals and strategic objectives were formulated by all the nine PEDs. These are applicable at least until the next strategic plans are released in 2009 (or even 2010).

Definition

Strategic goals are areas of organisational performance that are critical to the achievement of the mission. They are statements that describe the strategic direction of the organisation. It is useful to think of strategic goals as outcomes to be achieved by the organisation.

Strategic goals should focus on

- Service delivery
- Management/organisation
- Financial management
- Training and learning.

Provincial departments in a particular sector do not need to have a common set of strategic goals as priorities and emphasis is more than likely to differ across them. Nevertheless, they should relate to the national priorities for the sector.

Duration

Strategic goals would normally span at least five years, i.e. the electoral cycle, but may also be applicable to longer periods. While strategic goals should be reviewed annually as part of the national planning process, they should not be readily changed once they have been set for the current term of government.

Examples

The following are the strategic goals of **KwaZulu-Natal**, with strategic objectives included under each strategic goal:

SG1 Provide high quality, relevant education to all learners, regardless of age, which will equip them with knowledge, skills, values and attitudes to meet the challenges of the 21st century.

- Implement a relevant curriculum to support life-long learning
- Provide Educator capacity development for all phases.
- Provide resources to meet identified needs across the phases.

SG2 Transform the Department into a 21st century learning organisation focused on results, high performance, effective communication and quality service delivery.

- Implement an effective performance measurement system throughout the Department.
- Ensure that Batho Pele principles are implemented to achieve service excellence.
- Ensure good corporate governance

SG3 Transform schools and colleges into self-reliant and effective learning institutions that are also community centres for life-long learning.

- Create an environment that supports effective teaching and learning.
- Develop schools to obtain Section 21 status.
- Develop well-resourced facilities.
- Encourage community participation.

SG4 Develop the human resource capacity of the Department to meet the highest standards of professionalism in line with the requirement of the Employment Equity Act and other transformation targets.

- Ensure sustainable capacity building programmes.
- Develop leadership, management and governance skills at all levels.
- Promote employment equity.

SG5 Provide and utilise resources to achieve redress and equity and to eliminate conditions of physical degradation in institutions.

- Source additional funding for non-personnel expenditure.
- Develop and vigorously implement a plan to eradicate infrastructure backlogs in schools.

SG6 Eliminate fraud, corruption and maladministration.

- Promote a corporate culture of ethics, professionalism and accountability supporting well controlled systems.
- Develop a well-resourced, competent and responsive investigative unit.

SG7 Deal urgently and purposefully with the HIV and AIDS pandemic as part of an integrated provincial response.

- Develop a management plan to deal with the impact of HIV and AIDS in the workplace.
- Develop programmes to counter the negative effects of HIV and AIDS in schools and colleges.
- Ensure the integration of life-skills across the curriculum to combat HIV and AIDS and other health and social threats/hazards. Provide resources to meet identified needs across the phases.

The following are the strategic goals of **Mpumalanga** with strategic objectives included under each strategic goal:

SG1 To make our provincial systems work by making co-operative governance work.

- All learning institutions should have properly constituted and effectively functioning governing bodies.
- Develop the professional quality of schools.
- Implementation of PFMA.
- Strengthen the relationship among stakeholders.
- Community involvement and participation in schools.
- Ensure that the School Governing Bodies play their role as stipulated in the South African Schools Act.
- To ensure classroom-learning time is fully utilised and adhered to.
- Establishment of comprehensive and effective EMIS.

SG2 Significantly reduce illiteracy amongst youth and adults.

- To develop the ABET sector progressively.
- To increase the number of learners at ABET Sites, especially women, rural and poor learners.

SG3 Develop the quality of our teaching force and non-teaching staff.

- To develop a framework for educator development that promotes and enhances the competence and professional skills of all educators.

- To promote a framework for non-teaching staff development.
- To improve access and results and to minimize poor performance in schools.

SG4 Ensure the success of active learning through outcomes based education.

- Ensure effective and efficient classroom learning to ensure a working system.
- Educators and learners be effectively trained particularly on outcomes-based education.
- Education stakeholders be capacitated on outcome-based education

SG5 Deal urgently and purposefully with the HIV/AIDS pandemic through the Education and Training system.

- To make all advocates for HIV/AIDS.
- Popular material on HIV/AIDS be readily available.
- Life Skills and HIV/AIDS education be integrated in curriculum development.

SG6 Development a provincial education system that takes care of the welfare of learners.

- To supply food to needy schools through National School Nutrition Programme.
- Improve the physical conditions of schools.
- To make education accessible to all by providing scholar transport to needy learners.
- To ensure that learners who qualify are exempted from paying school fees.

SG7 Put systems in place to fight corruption and crime.

- Implement crime intervention programmes in all education and training institutions.
- To promote a safe school environment in partnership with communities and other government departments.

SG8 To link the curriculum with provincial growth and economic needs.

- To promote the development of programmes that are responsive to the social and economic needs of the province.
- To develop partnerships with other governments, sectoral education and training authorities (SETAs) and non-governmental organizations (NGOs) in order to provide programmes linked to the growth sectors of the province.

SG9 To improve the funding and budgeting processes of the Department.

- To develop planning tools to support the policy and budget processes.

- To improve the credibility of the budget.

SG10 To create a vibrant system to equip youth and adult learners.

- To prepare learners for the world of work through the Expanded Public Works Programme.
- To improve knowledge and access to FET colleges.
- Increase funding for FET.

1.3.2 Strategic objective (SO)

Definition

Strategic objectives are more concrete and specific than strategic goals. They should give a clear indication of what the department intends doing or producing in order to achieve the strategic goals it has set for itself. As such strategic objectives would normally describe high-level outputs or 'results' of actions that the department intends taking. As the name suggests, strategic objectives must be informed by strategy, which in turn must be based in policy. Strategic objectives are more policy-oriented than the closely related measurable objectives.

Strategic objectives may apply to the pre-tertiary education sector as a whole, or may apply to specific programmes.

Duration

Strategic objectives, like strategic goals, should also span five years, but are also likely to be applicable to longer periods. It is anticipated that in most sectors strategic objectives are likely to remain quite stable over-time.

Examples

See previous sub-section.

1.3.3 Programme

Definitions come here, detailed specs are in section 2.3.

1.3.4 Measurable objective (MO)

Definition

Measurable objectives identify very specific things that the department intends doing or delivering in order to achieve the strategic objectives, and ultimately the strategic goals it has set. There must therefore be a direct causal link running from a measurable objective to one or more of the strategic objectives. MOs can refer to the provincial education sector as a whole, or they can be linked to specific programmes or sub-programmes.

Measurable objectives must comply with the SMART principle, i.e. they must be specific, measurable, achievable, relevant and time-bound. They should be strongly informed by international best practice with respect to measuring education service delivery, and by global programmes such as EFA and the MDGs.

In determining achievement of measurable objectives, service delivery statistics must be used. These may be in the form of performance measures, or other data derived from statistical tables. In some cases, there may be a very direct link between a measurable objective and a performance measure. For example, the measurable objective 'To ensure that the population of compulsory school-going age in the province attends schools' is directly linked to the performance measure 'Percentage of the population aged 6 to 14 attending schools'. However, there would be cases where the matter is a more complex one, and a measurable objective would be underpinned by more than one performance measure, and perhaps several other data items from a statistical table.

Measurable objectives, unlike strategic goals, strategic objectives and performance measures, are referred to explicitly in the PFMA (see section 27(4)).

Duration

Given the fairly universal nature of the measurable objectives, they would apply over the longer term.

Determination

MOs should be harmonised nationally. The DoE and PEDs will jointly strive to maintain a set of core measurable objectives that reflects countrywide priorities and actions.

The following categories should be used for MOs: access, adequacy, equity, efficiency, output, quality.

Current core measurable objectives

See section 2.5 for a full list of all measurable objectives.

Discussion

The quantity of MOs and PMs in PED plans has been a cause for much concern and debate. National Treasury and the DoE have not agreed with the approach adopted by some PEDs of planning according to a great number of measurable objectives and performance measures. Too many MOs result in a situation where everything is prioritised, meaning nothing is prioritised. This causes confusion amongst the public and within Government. It has been agreed that within education we should not have more than about 30 MOs and 30 PMs. The core set should not exceed that quantity. PEDs that wish to add MOs and PMs, should not add more than 5 of each. PEDs are free to add new statistical tables if it is felt that more data needs to be presented. However, the set of MOs and PMs is a specific political and planning element that must be respected and kept simple enough for Departments to be kept accountable. Not covering specific issues within the set of MOs and PMs does not imply that Government does not regard these issues as important. Our planning and budgeting does not only take into consideration the measurable objectives and performance measures, to the exclusion of everything else. But our MOs and PMs are key planning objects that allow us to know whether we are at least getting a few crucial things right.

1.3.5 Performance measure (PM)

Definition

A performance measure is a variable, or an indicator, that takes on past and future values, where past values reflect achievements, and future values reflect performance targets. PMs are used to quantify achievement of measureable objectives, although there does not need to be a strict one-to-one correspondence between performance measures and measurable objectives.

Very importantly, the number of PMs should not be excessive. Sixty performance measures (which is what was arrived at in 2002) has been regarded as excessive, and Treasury and the DoE have been promoting a lower number of around 30. The reason why the number of performance measures must be kept within limits, is that the public, the Minister and others require a relatively compact picture of how well the education system performing. Too many indicators would just confuse audiences. Limiting the number of measures is not easy for the bureaucracies, given the lobby groups, all of which would like to see their issues reflected as indicators. There may well be figures that are important to include in the planning documentation, but that need not be considered PMs. Such figures may be included in the statistical tables as statistics. Moreover, performance measures themselves are reflected within the statistical tables.

Importantly, performance measures should in some way indicate how well Government is performing in delivering the education services. The analyst would gauge performance by, firstly, comparing values across a time series, for instance across several years and, secondly, by comparing values from different provinces to each other (and to international benchmarks). Performance measures should thus not be completely 'neutral' statistics such as total expenditure, or total enrolment.

It should be made very clear in all contexts where performance measures are used, how improvements should be read. There are some performance indicators, for instance the adult literacy rate, where any increase can be regarded as an improvement. However, there are other performance measures, for instance the net enrolment ratio for the FET band, where the figures should be interpreted with greater caution. A higher NER at the FET band is usually regarded as an improvement, but there may be cases where a lower NER is justifiable. A lower NER could reflect greater efficiency in the form of lower repetition, better employment prospects for the youth or a decision to shift resources from the FET band to the GET band for strategic reasons. It is extremely important that performance measures should not be interpreted in a manner that is over-simplistic.

Duration

The duration of the PMs follows very much the duration of the MOs they describe. There are PMs, for example net enrolment ratios that are permanently applicable. Others, for instance those related to the tackling of physical infrastructure backlogs, can be considered more temporary in nature.

Determination

As with the MOs, the DoE and PEDs should strive to harmonise performance measures. Nationally determined PMs, referred to as **core performance measures**,

are listed in sub-section 2.5 of this document, and technical specifications relating to these PMs are provided in sub-section 2.5.2.

DoE and PEDs should strive for synergy between South Africa's system of education performance measures, and education indicators used by international bodies, in particular UNESCO. Sub-section 3.7 provides references to important documents in this regard.

PMs determined provincially are referred to as **provincial performance measures**.

Each performance measure relates to one of the categories also applicable to the measurable objectives: access, adequacy, equity, efficiency, output, quality.

Numbering

Each performance measure has a code such as PM003, PM312 or PPM709. 'PM' indicates that the performance measure is a national performance measure. 'PPM' indicates that we are dealing with a provincial performance measure. The first of the three digits refers to the provincial budget programme concerned – value 0 indicates that the performance measure is not specific to any one budget programme, but refers to the provincial education sector as a whole. The last two digits, when combined with the first digit, create a unique number for the performance measure. The final two digits of provincial performance measures should be in the range of 51 to 99, so that it is easier to distinguish core and provincial PMs. Hence a first provincial performance measure within programme 2 would be PPM251, whilst a first core performance measure within that programme would be PM201. The numbering system does not take into account sub-programmes.

Current core performance measures

See section 2.5 for a full list of all measurable objectives.

1.3.6 Performance target (PT)

A performance target is a specific or planned level of result that should be achieved in a future in time with respect to a performance measure. The performance targets will identify changes from one year to another in the education system. Performance targets can also help in establishing progress towards strategic objectives of provinces. The performance targets are found in the statistical tables.

1.3.7 Statistical table (ST)

Definition

A statistical table in the PFMA planning and reporting context for education, is a standard table used repeatedly across many planning and reporting cycles to capture key statistics relating to education service delivery.

A special kind of statistical table is the *key trends table,* there is one such statistical table for each budget programme (and one each for sub-programmes 2.1 and 2.2). In these key trends tables, both past and future years are reported on. Future financial figures are those of the MTEF. Other statistics for the future, for instance number of learners benefiting from school nutrition, must be projected figures based on plans and future budgets.

Normally, performance measures and performance targets are embedded within particular statistical tables.

Determination

Statistical tables that are determined nationally for use across all provinces are called **core statistical tables**. Statistical tables that are used by only one or a few provinces are called **provincial statistical tables**.

Numbering

The rules for the numbering of statistical tables are similar to those applicable to performance measures (see above). However, for statistical tables 'ST' replaces 'PM'. Examples of codes to identify statistical tables would thus be ST002, ST301 and PST752. The last two digits of provincial statistical tables should begin at 51, and should not be lower than 51. This is to make it easier for the reader to identify the core statistical tables.

1.3.8 Indicator

Indicators are used to establish and monitor progress towards performance goals. Indicators help in the improvement of service delivery in a sector. In education an indicator can provide us with information about the performance of education.

An indicator can establish benchmarks for success or failure. Indicators help in establishing performance standards for programmes. The indicators that are chosen should be clearly defined in order for the results to be interpreted. The time and costs that will be needed to get the data must be noted. The values for the indicators should be in percentage terms or, where monetary values are used, real values.

In the reporting system described in this document, the term generally used for an indicator is performance measure.

1.3.9 Millennium Development Goal (MDG)

In September 2000 147 heads of state and government and 189 nations in total committed themselves to achieving the Millennium Development Goals by the year 2015. The millennium development goals are

- Eradicate extreme poverty and hunger.
- Achieve universal primary education.
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health.
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop global partnerships for developments.

The aim of the goals is to improve people's lives. The first seven goals are aimed at eradicating poverty in all forms. The last goal is the mean to achieve the other goals. Poor countries will require the help of richer countries in order to achieve the above goals. There are 18 targets and 48 indicators to assess progress to the year 2015. The millennium development goals can be accessed on the website www.unmillenniumproject.org.

1.4 Developments so far

The DoE and National Treasury arrived jointly at a set of guidelines for strategic plans in 2002. These guidelines were captured in the following document:

> *Education Strategic Planning Framework and Formats (Version 4: Final for 2003/04-2005/06 cycle)*

The guidelines in the above document influenced the formats of the Annual Reports and Quarterly Performance Reports of the PEDs. Measureable objectives were moreover incorporated into the Budget Statements of a number of provinces.

Provincial education annual performance plans (or "strategic plans") were analysed in the DoE at the beginning of 2003 and again in 2004, and lessons were learnt regarding the formats of these documents, and the 'planning language' used. Moreover, in meetings between the DoE and PEDs, various problems were identified:

- There was a feeling that 31 measurable objectives and 60 performance measures was excessive.
- The box format in which activities linked to measurable objectives were written down was not regarded as appropriate. It was felt a more narrative approach would be better. This was partly due to the fact that there is no neat one-to-one correspondence between measurable objectives (or performance measures) and activities.
- It was felt that the analysis and the planning should be more integrally linked in the document.

The result was a number of changes that were adopted early in 2005. It was decided to tighten up the definitions and purpose of the various planning elements (objectives, goals, etc.). It was also decided to restructure the APP (as part of a process in which clearer and better structures would be established for all the documents). These changes are summarised in the following two tables.

Figure 1: 2005 changes to the APP and the planning framework in general

<u>Previous APP format</u>

Part A

Overview. Elements include:

> Strategic goals
> Strategic objectives

Part B

Detailed plans. Elements include:

> 8 programmes

In one table format:
> 31 measurable objectives
> 31 activities
> 65 performance measures

In another table format:
> 65 performance measures
> Performance targets

Part C

Background analysis. Elements include:

> 17 statistical tables

What changes:

- 3 different parts aimed at 3 different audiences.
- Part A more clearly a public-oriented summary of the more technical analysis and planning.
- The separation of planning in Part B and analysis in Part C disappears. Both planning and analysis incorporated in an integrated way in Part B.
- Highly tabular approach to the planning texts replaced by more narrative approach centred around the statistical tables (which move from Part C to Part B). The analysis and planning going into the narrative is guided by clear sets of requirements.
- Performance measures and targets all become incorporated in the statistical tables.
- Part C becomes a non-compulsory section for including additional analysis aimed at an internal Government audience.

<u>New APP format</u>

Part A

Overview. *For wide public audience.* Elements include:

> National strategic goals
> National strategic objectives
> Guidelines for sub-sector summaries

Part B

Detailed analysis plus plans. *For more specialised public audience*. Elements include:

> 8 programmes
> 25?? strategic objectives (per prog.)
> 30 measurable objectives (per prog.)

In 19 statistical tables:
> 39 performance measures
> Performance targets
> Detailed guidelines for analysis

Part C

Background analysis. *For internal Government audience only.* No prescribed elements.

2 REQUIREMENTS

2.1 Requirements and availability of data and capacity

Essentially four reasons have been put forward in the past for poor quality of plans and reports submitted by PEDs into the Treasury PFMA processes:

- Lack of staff in the PEDs to undertake the work.
- Inadequate skills amongst existing staff, in particular with respect to data analysis, report-writing and planning in general.
- Lack of reliable data, in particular non-financial data.
- Unnecessary complexity in the national reporting and planning requirements.

The last point has received considerable attention in the DoE and Treasury, and requirements and formats have changed in order to facilitate the process (whether the new formats imply less work is debatable – they concentrate on streamlining the requirements and hence making the work less onerous).

With respect to the problem of inadequate skills, the Directorate: Budget Monitoring and Support was established in the DoE during 2004 to fast-track skills development in PEDs in this area of work. It is envisaged that this Directorate will, on the one hand, hire service providers to provide the necessary training and development of support tools and, on the other hand, become directly involved in supporting one or two provinces in the medium term in order to establish benchmarks of good practice that can be used for other provinces.

With respect to staff shortages, this manual provides a clearer indication than before of the skills and person days required for the production of the various reports and plans (see section The spreadsheet tool). This should facilitate the process of recruiting in those provinces with inadequate staff, as well as the process of designing optimum budget and planning offices in the PEDs.

With respect to data supply problems, the following should be regarded as the minimum requirements:

- **There should be evidence that available Government data has been thoroughly interrogated.** All PEDs can have access to financial data, at least some EMIS data covering infrastructure, schools and learners, and Persal personnel data. PEDs are expected to use such data sources in the compilation of reports such as the APP. Where EMIS data suffers from reliability problems, reports such as the APP should be specific about where the problem lies – e.g. problems with repeater data should be expressed in terms of which grades seem unreliable, and the estimated degree (in percentage terms) of under- or over-reporting.
- **There should be evidence that the PED is aware of a range of secondary sources of data.** Organisations such as the HSRC, the NBI, and various universities periodically release research into education services, and often this research includes references to data collected in smaller samples of the education system. Concrete examples are the 2005 reports of the HSRC into teacher supply, the 2003 HSRC Human Resources Development review, the 2005 Nelson Mandela Foundation report on rural education. These sources are

often an invaluable source to verify the primary sources, or as an alternative to the primary source, if the latter is not reliable. Reports such as the APP should not allow important data gaps in the analysis when the data is available from a secondary source. This implies that PEDs need to remain abreast of the education analysis produced by other organisations.

- **Where there is no data available, reports should indicate what information systems development is under way to improve the situation.** Where systems do not permit the presentation of key data, in particular data relating to the statistical tables and the performance measures, it is understandable that there would be gaps in documents. However, it is extremely important that the gap be acknowledged, and that there should be an indication of how current and future systems development will allow for data availability at a future date.

2.2 The plans and reports in a nutshell

2.2.1 Five-year Strategic and Performance Plan (SPP)

All the text on each of the documents to be tidied up. Only the APP specs have been reworked.

- Purpose: The purpose of the Five-year Strategic and Performance Plans is to set out the newly elected provincial government's and MEC's strategic policy priorities and plans for the next five years. This document should serve as a blueprint for what the provincial department plans to do over the next five years.

- Focus: The focus of the document is to specify strategic goals for the provincial department as a whole, and strategic objectives for each of its main service delivery areas that the provincial department will strive to achieve over the next five years. The intention is that these goals and objectives lay the foundation for the development of the Annual Performance Plans.

See point on budget realism under S3.

- Time frames: As the name implies this document must cover a period of five years from the first planning cycle following an election. Only one Five-year Strategic and Performance Plan per provincial department will be produced per election cycle.

- Linked to: The document must be developed taking into consideration a wide range of other planning frameworks ranging from the President's Medium Term Strategic Framework through to the Integrated Development Plans of local governments. It is also important that the plans take into consideration the resource envelope specified in the current provincial MTEF. The document lays the foundation for the development of the Annual Performance Plans. The provincial department's performance against its Five-year Strategic and Performance Plan must be evaluated and reported in the End-Term Review.

- Provincial departments need to take all the abovementioned planning frameworks into account when developing their Five-year Strategic and Performance Plans.

- Ideally there should be a clear 'top-down' link between the national, provincial and sectoral priorities and the department's own strategic goals and objectives. It should also be clear how implementation of the department's Five-year Strategic

and Performance Plans will contribute to the progressive realisation of the overarching national and provincial government goals and objectives.

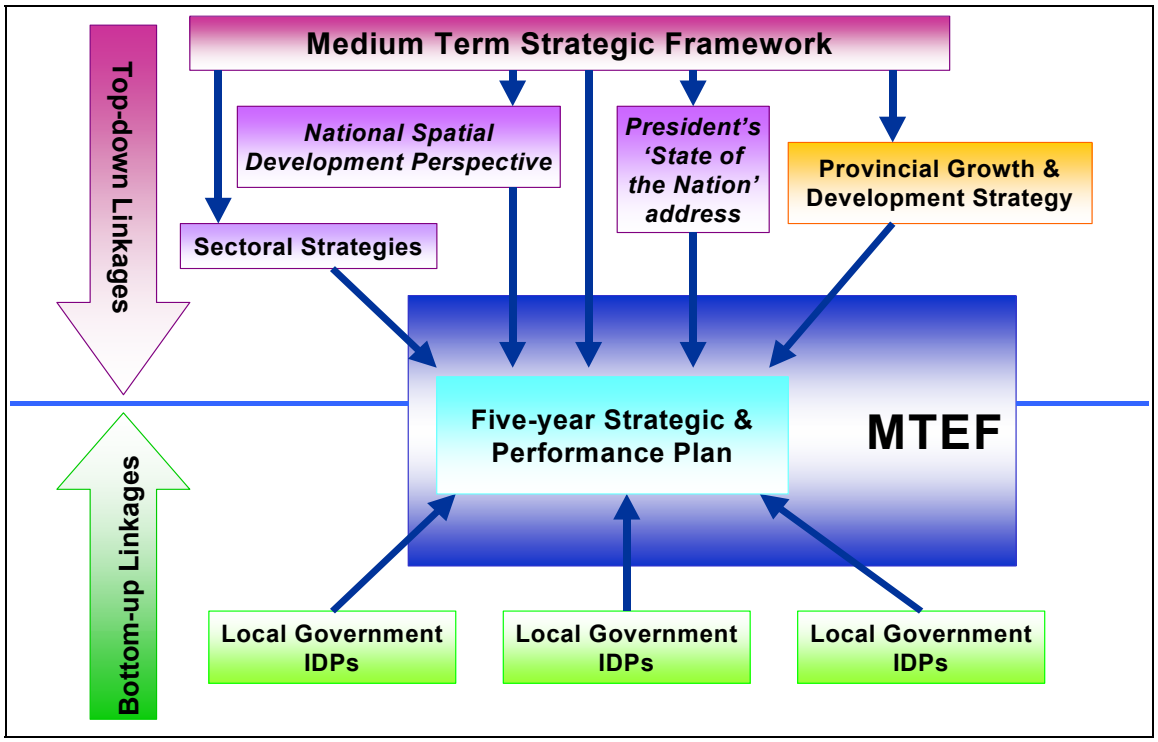
- It is, however, also crucial that a department's strategic planning process also facilitates a 'bottom-up' process for determining priorities. There should be clear links between the department's Five-year Strategic and Performance Plans and local governments' IDPs. For instance, if a local government is establishing new residential areas the relevant provincial departments need to contribute to the development by building (and running) the required schools, clinics and other facilities in the area.

- In addition, strategic planning should involve a process of interaction between the provincial head office and the department's district offices so that 'grassroots information' informs the plans. However, it needs to be recognised that just as departmental managers formulate plans for the whole department in the context of overarching national and provincial frameworks, so to do district managers plan their activities within the framework set by the departmental strategic plan and budget.

- It is envisaged that this 'top-down-bottom-up' planning process will assume increasing importance as the policy of decentralisation is implemented progressively in each of the various sectors, both at a national and provincial level.

- The following figure illustrates the relationship between these different planning frameworks and provincial departments' Five-year Strategic and Performance Plans.

Figure 2: Planning frameworks that inform the development of Five-year Strategic and Performance Plans



- The above figure shows the top-down-bottom-up relationships between the various planning frameworks and the planning process that leads to the production of a provincial department's Five-year Strategic and Performance Plan. The solid arrows indicate that the provincial departments are required to develop their Five-year Strategic and Performance Plans within the policy parameters set by the various frameworks noted. In practice this is likely to significantly reduce the provincial department's degrees of freedom when doing its planning. This is almost inevitable, and is inherent in the principles of co-operative government set out in Chapter 3 of the Constitution.

- Although a provincial department's choices are quite constrained when it comes to choosing policies, there are far fewer constraints on it when it comes to developing innovative ways of managing the actual implementation of policies. The Five-year Strategic and Performance Plans of provincial departments should therefore probably focus more on developing strategies to implement policies rather than on the development of policies.

- Each provincial department is required to produce a Five-year Strategic and Performance Plan in the first planning cycle following an election. It is therefore imperative that the management of a department accesses the latest information on the other planning frameworks and evaluates carefully how these should impact upon their plans. Similarly it is imperative that those responsible for these various planning frameworks ensure that they get updated and communicated to all provincial departments during the first planning cycle following an election so that they do indeed inform provincial department's planning processes. All role-

players need to recognise that this initial planning period after an election is critical to the effective planning of service delivery over the next five-years.

However, government's policies do not remain static between elections. Therefore while there may be significant policy development immediately following an election, there will also be ongoing changes to policy in response to emerging problems and changing economic and social circumstances.

2.2.2 Budget Statement 2 Education Chapter (BS2Ed)

2.2.3 Annual Performance Plan (APP)

Mandate

The requirement for each PED to produce an *Annual Performance Plan* is laid down in terms of the PFMA, National Treasury's *Guidelines for Accounting Officers* and *Guidelines for Annual Reporting.*

Purpose and target audiences

The purpose of the APP is to set out what the provincial department intends doing in the upcoming financial year, and the following two years of the MTEF, towards progressively achieving the full implementation of the *Five-year Strategic and Performance Plan*. The target audience is both the electorate in general, and specialists working in government, NGOs, unions, research institutions, international partner organisations, and business.

Focus

The document focuses on recent policy changes (if any), on recent trends in the service delivery environment, and on how this affects the ability of the PED to pursue the five-year strategies. It also focuses on recent progress made, partly in terms of measurable objectives, and on future performance targets and the way in which budgets and strategies are geared towards these targets. The APP may include formal changes to commitments made in the *Five-year Strategic and Performance Plan*.

Timeframes

As the name implies this document covers the upcoming financial year. It should also cover the following two years in line with the MTEF.

Methodological and consultation issues

Producers of the APP need to be highly familiar with education planning issues in general, and the planning and data issues of the PED in particular. Inputting by Treasury and DoE during the production of the plan is important. By 31 August of each year, PEDs should submit draft versions of their next APP to their Provincial Treasuries. National Treasury, the DoE and the relevant Provincial Treasury will provide feedback on the APP by 15 October (the DoE obtains copies of the drafts and provides feedback through National Treasury). By 10 December, PEDs must

submit amended APPs to their Provincial Treasuries, and once again the Treasuries and DoE will have an opportunity to make inputs on the document. National Treasury will make the final assessment as to whether the APPs comply with the requirements. Where APPs do not comply, PEDs must make the necessary amendments immediately, on the basis of inputs received from National Treasury. APPs must be finalised by 31 January, and publication occurs in March.

Basic structure

The basic structure of the APP is as follows:

- **Part A: Overview and strategic plan update.** This part of the APP must explain the challenges facing the PED in terms of social and demographic pressures, education and other policies, and the strategies laid down in the *Five-year Strategic and Performance Plan.* It should also explain successes that have been achieved by the PED in meeting these challenges. Strategies for going forward, as they appear in the *Five-year Strategic and Performance Plan*, and as subsequently amended, should be explained. New amendments to the strategies of the *Five-year Strategic and Performance Plan* may have to be established. Part A should be aimed at the electorate in general, so complexities, lengthy explanations and inaccessible technical language should be avoided. Moreover, the PED should use Part A to underline how cooperation with and action by communities, parents, unions and other stakeholders are indispensable for the achievement of government's strategic goals. Much of Part A will not change from year to year, due to the nature of the information.

- **Part B: Sector, programme and sub-programme plans.** This part of the APP must explain in broad terms how the PED budget as a whole, and the individual programme and sub-programme budgets in the coming financial year, and the remaining two years of the new MTEF, will be used to pursue measurable objectives relating to the sector, the programmes, and the sub-programmes. Part B is aimed largely at a more specialist audience, so it is important that key data relating to inputs, e.g. personnel, infrastructure and learners/students, be presented in a set of core statistical tables. Moreover, data relating to a set of no more than fifteen??? performance measures, including past actuals and future performance targets, must be included in Part B. Key education planning topics, both universal and South Africa-specific ones, should be discussed, wherever possible with reference to credible data.

- **Part C: Background information.** Importantly, this part of the APP is generally not published (though the public may have access to it). In this section, PEDs would insert discussions that planners in government would need to be aware of, for example discussions relating to data anomalies, especially where such anomalies made it impossible or difficult to gauge demand for services or impact of service delivery. Part C would also provide an opportunity for the PED to put forward formally interpretations and proposals that it felt should have a stronger presence on the education planning agenda. Should geographical boundaries or the organogram applicable to a PED change, details in this regard, including maps and organograms, should be inserted into Part C.

Links to other plans and reports

The APPs should inform and be informed by both the *Five-year Strategic and Performance Plan* and the MTEF budgets. Indeed these plans should show how the PED's future service delivery plans link to its MTEF and its five-year strategy. The in-

year implementation monitoring of the APP is done through the *Quarterly Performance Reports*, while the end-year reporting is done in the *Annual Report*.

There is the potential for much unnecessary duplication across three major annual documents: *Budget Statement 2, Annual Performance Plan, Annual Report.* The following guidelines are aimed at reducing unnecessary duplication:

- BS2 is *the* major publicly released source document for PED budget information. Expenditure and budget data in the APP and AR should be limited to what is truly needed in those documents. Much of the detailed sub-programme and economic category expenditure data would not feature in the APP and AR.

- The APP is *the* major publicly released source document for updated performance measure and performance target data. This requires the APP to carry a substantial amount of background information regarding this measurement data, including definitions, data problems encountered and being resolved, and so on. This background data should not be repeated in BS2 or the AR. However, there is clearly a need for some information on performance in these two other documents. Such information should be of a summary nature, probably just a table with the description of each performance measure, and a six-year series of actual accomplishments and future targets. There would then be a reference back to the APP for more detailed information, including definitions of all of the performance measures. If we have just 30 performance measures, the performance data in the BS2 or AR should fit into a table spanning about four pages. The APP also contains very important analysis about service delivery trends, and the implications of this for planning ahead. This analysis should be referred to in the BS2 and AR, but ought not to be repeated.

- The AR looks back on the trends of the previous financial year. The difference between this analysis and the trend analysis contained in the APP, is that in the AR the focus would be largely on issues of management and process, whilst in the APP the analysis would focus more on the service delivery trends over several previous years. The AR would thus focus more on matters of procurement, project management, crisis management, financial accounting and the major reports and research completed, whilst the APP would provide the in-depth analysis of trends with respect to enrolment, per capita spending, outputs, and so on. There would obviously be some overlap between the two, but this should be minimised.

The above three bullets capture some important proposals on how to deal with the perceived duplication between the three documents in question. The matter requires further discussion.

Distribution issues

National Treasury makes the APPs (without Part C) available to the public, mainly through the publication of the nine provincial documents on the National Treasury website. Moreover, Provincial Treasuries and PEDs are required to publish the APPs on their organisational websites. Electronic versions of all the nine APPs *with Part C* are distributed by National Treasury to the DoE, all nine PEDs, and all nine Provincial Treasuries – each organisation should have a full set from all nine provinces.

2.2.4 Operational Plan (OP)

2.2.5 Monthly Financial Report (MFR)

- Purpose: The purpose of the Monthly Financial Reports is to report on progress made with the implementation of the department's Budget in the previous month.

- Focus: The focus of Monthly Financial Reports is to provide the provincial treasuries and National Treasury with information on departmental expenditures so that they can monitor progress and pick up early signs of possible problems so that they can be managed before they escalate. It also provides the accounting officer an opportunity to indicate what measures he or she is taking to ensure that implementation of the Budget remains on track.

- Time frames: within fifteen days of the end of each month the information must be submitted to the relevant treasury.

- Linked to: The Monthly Financial Reports are consolidated into the Quarterly Financial Reports which the provincial treasuries are required to submit to the National Treasury. Obviously, all monthly financial information has to be consolidated into the annual financial statements.

In addition, the third quarter Monthly Financial Report provide information on the current year's implementation of the budget to be taken into consideration in the updating of the Five-year Strategic and Performance Plan and the development of the Annual Performance Plan and Budget for the following year.

In terms of the PFMA accounting officers are required to report on the department's expenditure against Budget on a monthly basis. The Monthly Financial Reports are the instruments used for such reporting.

2.2.6 Quarterly Performance Report (QPR)

- Purpose: The purpose of the Quarterly Performance Reports is to report on overall progress made with the implementation of the department's Annual Performance Plan in the previous quarter.

- Focus: The focus of Quarterly Performance Reports is to provide the executive authority, the provincial treasury and National Treasury with information on the department's performance against its plans so that they can monitor progress and pick up early signs of possible problems, before they escalate. It also provides the accounting officer an opportunity to indicate what measures he or she is taking to ensure that implementation of the department's Annual Performance Plan remains on track.

- Time frames: within thirty days of the end of the quarter.

- Linked to: The Quarterly Performance Reports are ultimately consolidated into the departmental performance section of the Annual Report.

- In addition, the third quarter Quarterly Performance Report provide information on the current year's performance to be taken into consideration in the updating of

the Five-year Strategic and Performance Plan and the development of the Annual Performance Plan and Budget for the following year.

▪

Similarly, accounting officers are required to report quarterly on their progress with service delivery, and the Quarterly Performance Reports are the instruments they use for doing so.

As shown in Figure 1, the third quarter Monthly Financial Reports and Quarterly Performance Reports are particularly important as they provide information on the current year's performance (Year 0) to be taken into consideration in the updating of the Five-year Strategic and Performance Plan and the development of the Annual Performance Plan and Budget for the following year (Year 1). Note that any updating of the Five-year Strategic and Performance Plan should be reported in Part A of the following year's Annual Performance Plan (Year 1) - (see formats in Section Two and Four).

2.2.7 Annual Report (AR)

- Purpose: The purpose of the Annual Reports is to report on the provincial department's performance in the preceding financial year for the purposes of oversight.

- Focus: The focus of Annual Reports are twofold: first is to report on the department's performance relative to the performance targets it set itself in its Annual Performance Plan at the beginning of the year. Second, to present the department's audited annual financial statements – that, among other things, reflect on the department's implementation of the Budget, and the state of financial management systems within the department.

- Time frames: the time frames for the submission of the annual financial statements for auditing etc, and for the tabling of the Annual Reports are set out in the PFMA and the Treasury Regulations.

- Linked to: As indicated above, Annual Reports report on the implementation of the Annual Performance Plan and Budget. Obviously all the in-year reports will assist in the drawing up of the Annual Reports. These Reports should be subjected to an annual review and oversight process. Recommendations emerging from this process would feed into the planning and budgeting process for the following year +1.

At the end of the financial year, the accounting officer has to compile annual financial statements to report on the implementation of the Budget, and an Annual Report to report on the implementation of the Annual Performance Plan (Year 0). All the information contained in the Annual Report, as well as information on the evaluation of managers' individual performances against their Performance Agreements should feed into an annual review and oversight process that should involve the relevant executive authority, and both the Public Accounts Committee and relevant Portfolio Committee of the provincial legislature. Coming out of this review and oversight process should be recommendations regarding the updating of the Five-year Strategic and Performance Plan that would feed into the planning and budgeting process for Year 2.

It is important to note that the Annual Report, and the outcome of the annual review and oversight process for say Year 0 cannot constitute the starting point for the annual planning and budgeting cycle for Year 1. By its very nature an Annual Report is only available to the end of a financial year. Therefore by the time the Annual Report for Year 0 becomes available, all the plans and budgets for the following Year 1 have to be in place. There is therefore absolutely no scope for the information produced after the beginning of the financial year to have any meaningful impact on the plans and budgets for that financial year. For this reason, the third quarter Monthly Financial Reports and Quarterly Performance Reports are important inputs into the following year's planning and budgeting process. It is also the reason why the recommendations arising from the annual review and oversight process only feed into the following year +1 planning and budgeting process.

2.2.8 End-term Performance Review (EPR)

In order to complement the Five-year Strategic and Performance Plans, it is suggested that departments should be required to produce End-term Reviews towards the end of the government's term in office. The department will report on the extent to which it has succeeded in achieving its overall strategic goals and strategic objectives that it set itself at the beginning of the five-year period. These reports could also be used as handover reports to the incoming elected political office bearers and to facilitate the smooth transition process in such instances.

There are also currently discussions underway regarding putting in place a Ten-year Review – 2014. The process is being driven by the Presidency. Clearly the End-term Reviews would feed into such a review.

2.2.9 Performance Agreement (PA)

- Purpose: The purpose of the Performance Agreements is to give effect to a performance related incentive and reward system for managing senior departmental official's job performance.

- Focus: The focus of Performance Agreements is to specify individual performance targets for the accounting officer and other senior officials. The accounting officer would sign his or her Performance Agreement with the executive authority, while senior officials would sign their Performance Agreements with the accounting officer.

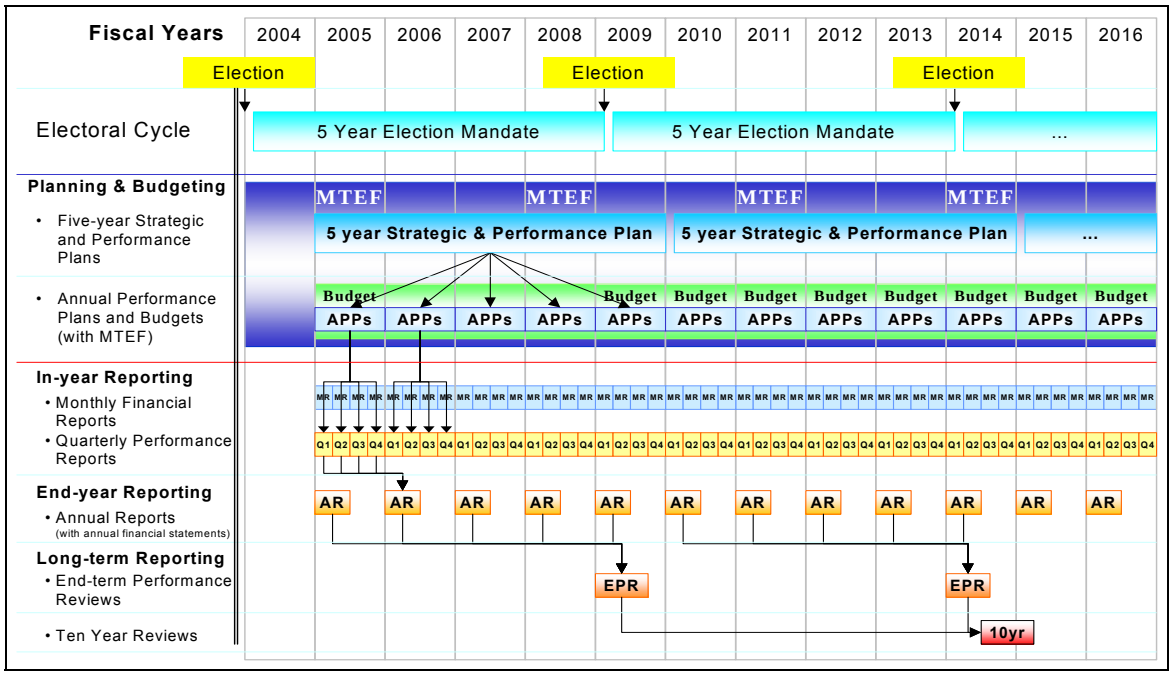
- Time frames: All Performance Agreements should be signed within fifteen days of the beginning of the financial year.

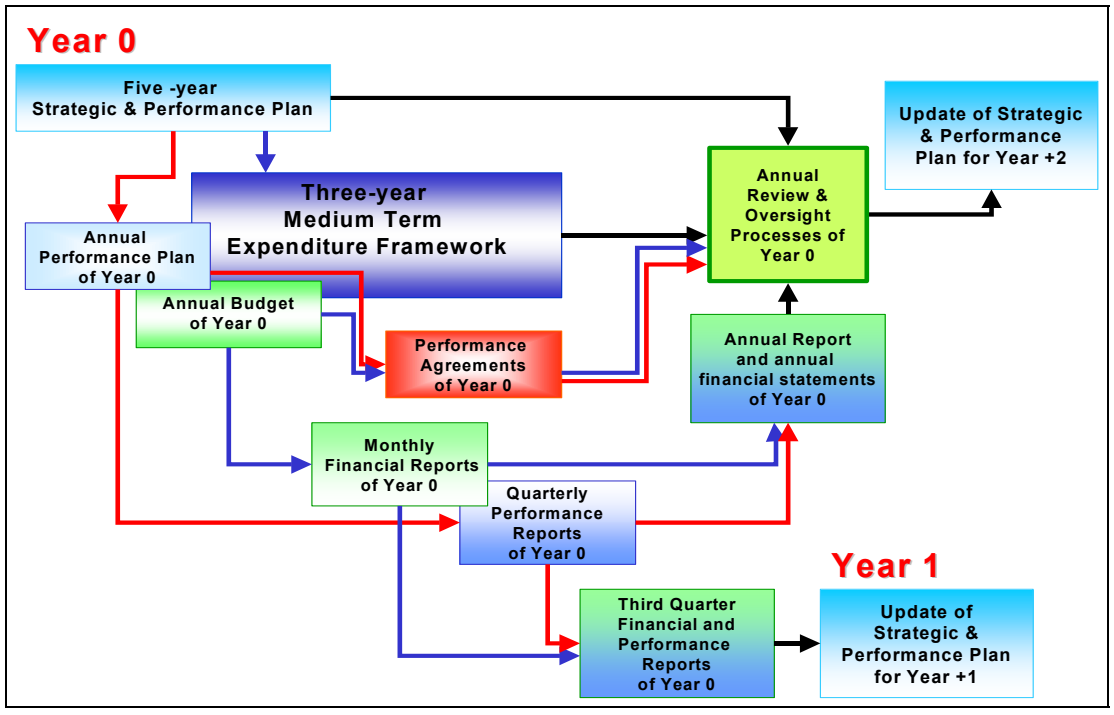
- Linked to: All Performance Agreements should be linked directly to the achievement of the Five-Year Strategic Plan, the implementation of the Annual Performance Plan, and the Budget. At the end of the financial year, the Performance Agreements should be subject to a review process, and the relevant senior officials rewarded and sanctioned according to their performance. It is envisaged that departments, only after the financial and performance results become available and against the background of the Audit-General's report, would either award or sanction the performance of senior officials within departments.

Make it clear that Pas are not required in terms of the PFMA, but rather in terms of ???. Also that PEDs do not need to submit these documents to Treasury.

2.2.10 Summary of plans and reports

Figure 3: Overall system





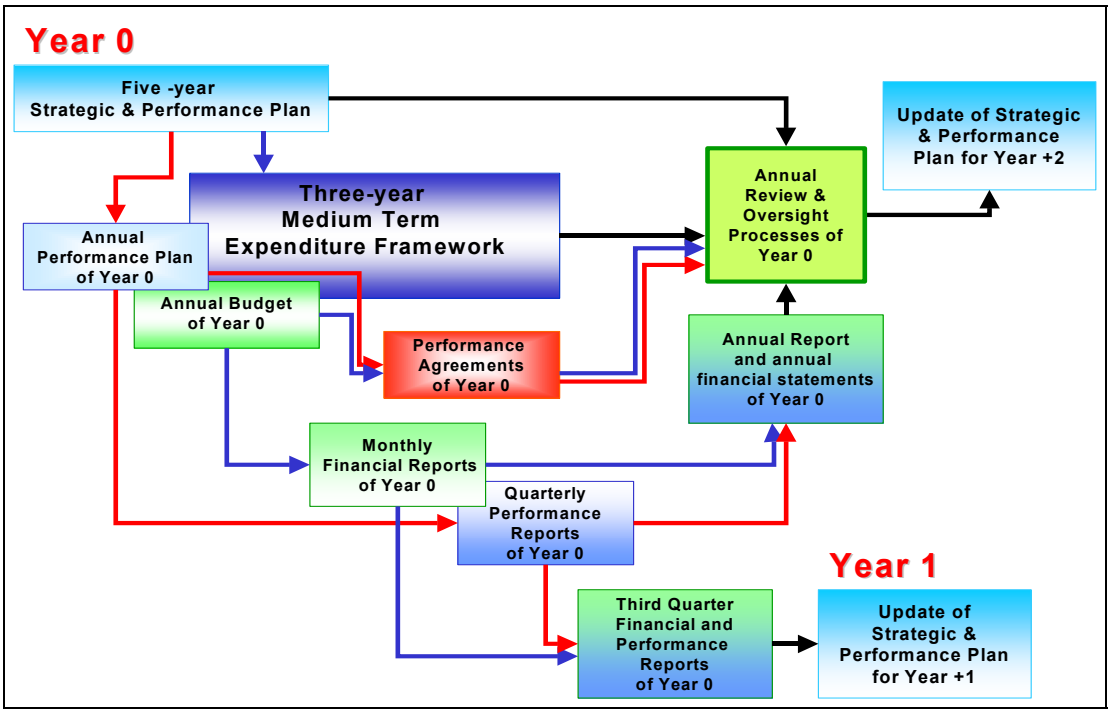


Figure 1 shows that the Performance Agreements of the accounting officer and senior management of a department should be linked directly to both the Annual Performance Plan and the Annual Budget. In essence these agreements should make them individually responsible for the implementation of the Annual Performance Plan and Budget (or relevant portions thereof). At the end of the year their individual performances should be evaluated in terms of the extent to which they succeeded in spending the budgets and achieving the relevant performance targets that were made their responsibility in terms of their Performance Agreements.

Figure 4: Linking planning processes across years

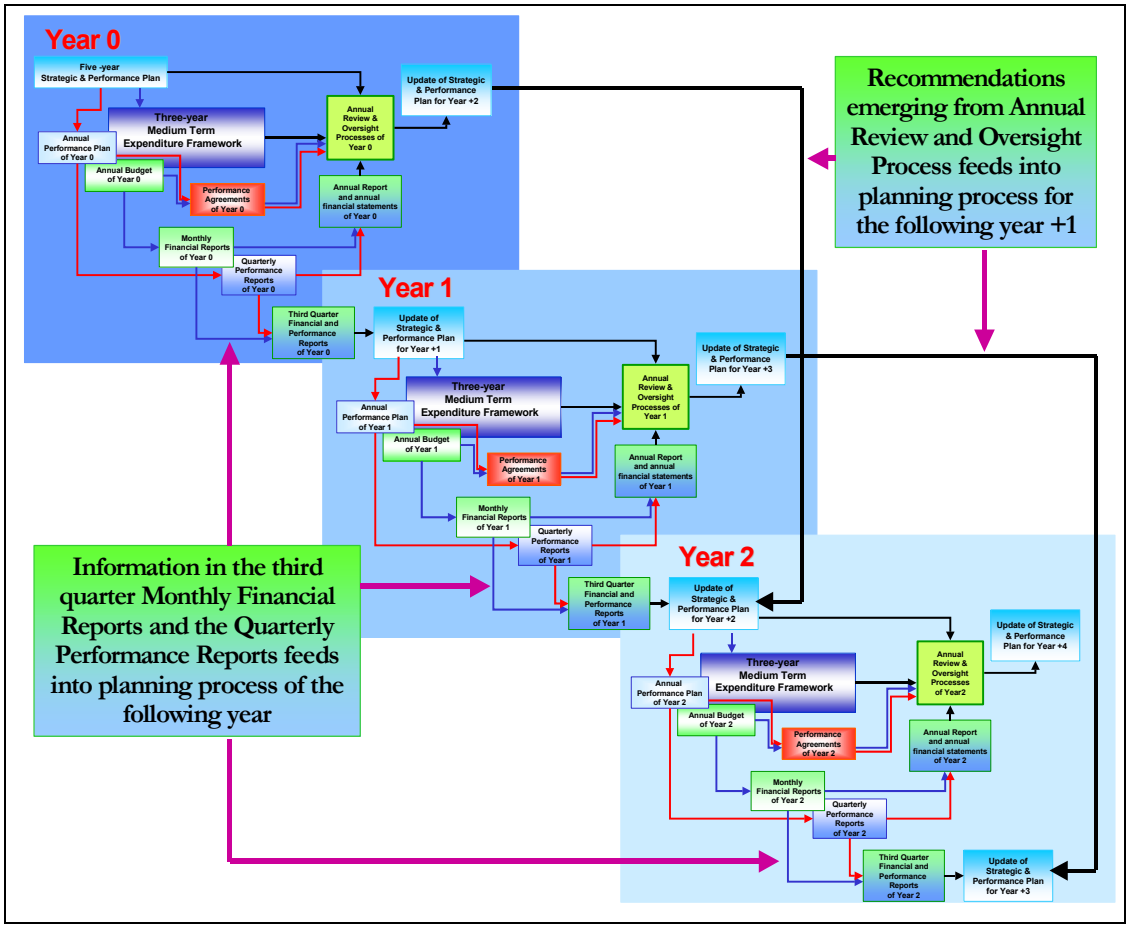
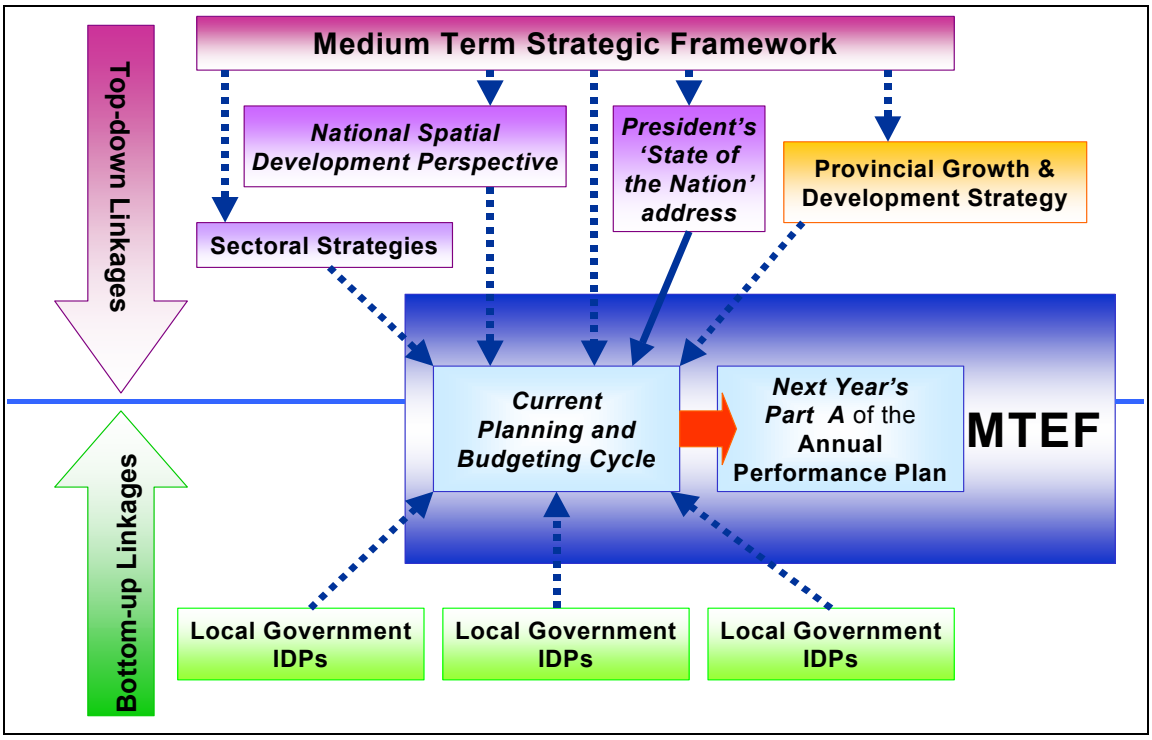


Table 1: Table heading test

Table 2: In-term policy revisions captured in Part A of Annual Performance Plans



Note that any policy revisions to existing planning frameworks have to feed into the provincial department's current planning and budgeting cycle, and can only be captured in the following year's Annual Performance Plans. In other words there is an inevitable delay of at least a year between the announcement of a new policy initiative (for instance in the President's 'State of the Nation' address) and inclusion of the initiative in the plans and budgets of a provincial department.

2.3 The eight budget programmes

The following table provides the definitive definitions and specifications currently in use with regard to the eight provincial budget programmes:

Currently, there is no single entrenched way in which provinces are making the budget split between sub-programmes 2.1 and 2.2 (together these sub-programmes constitute 85% of all provincial education expenditure). There are good reasons for not allowing the current approach (see table below) to become entrenched, and for changing the specs. The current use of Grade 8 as a cut-off results in some 11% of learners being 'incorrectly'

placed – e.g. a Grade 8 learner placed in the primary school sub-programme would be regarded as incorrectly placed. However, if we used Grade 9 as a cut-off instead, only 4% of learners would be incorrectly placed. (It is assumed that the option of splitting individual schools across sub-programmes remains out of the question.)

Other problems with the 2002 programme structure have also been identified. These are being dealt with through slightly separate processes (separate from the core work of the Task Team).

No.	*Programme/ Sub-programme*	*Objective of Programme/ Sub-Programme*	*Expenditure items and payments included and excluded*
1	**Administration**	To provide overall management of the education system in accordance with the National Education Policy Act., the Public Finance Management Act, and other policies.	Includes publicly funded expenditure items, in particular educators, non-educators and office items, utilised for governance, management, research and administration, as well as general office services, e.g. cleaning and security services, if utilised in the provincial head office and its subsidiary regional, district and circuit offices. Excludes expenditure items for professional support, e.g. psychological counselling and educator and management training, offered directly to staff in institutions, as well as any other support offered directly to institutions.
1.1	Office of the MEC	To provide for the functioning of the office of the Member of the Executive Council (MEC) for education.	Includes programme 1 expenditure items offered to the office of the MEC for education, including services relating to communications, research, planning, etc., where the service is offered within the office of the MEC.
1.2	Corporate services	To provide management services that are not education specific for the education system.	Includes programme 1 expenditure items if they are generic and not education specific, e.g. if they relate to financial management, legal services, provisioning, logistics, cleaning or security.
1.3	Education management	To provide education management services for the education system.	Includes programme 1 expenditure items if they are education specific, e.g. if they relate to education planning, education information or curriculum development. Excludes any education specific services offered directly to institutions.
1.4	Human resource development	To provide human resource development for office-based staff.	Includes programme 1 expenditure items required for in-service training of office-based officials, including educators, but also funds for bursaries offered to such officials.
1.5	Conditional grants	To provide for projects under programme 1 specified by the Department of Education and funded by conditional grants.	
1.6	Education Management Information System (EMIS)	To provide an Education Management Information in accordance with the National Education Information Policy.	
2	**Public ordinary school education**	To provide public ordinary education from Grades 1 to 12 in accordance with the South African Schools Act.	Includes all publicly funded expenditure items specific to the provisioning of Grade 1 to Grade 12 education in public ordinary schools. Both expenditure items purchased by the department, and transfer payments to Section 21 schools from the state are included here.
2.1	Public primary schools	To provide specific public primary ordinary schools with resources required for the Grades 1 to 7 phase.	Includes all programme 2 expenditure items utilised in the schools themselves, or goods, services or payments allocated to specific schools, e.g. educators provisioned through the post provisioning model and attached to institutions, or school-specific funds allocated through the Norms and Standards for School Funding, where these resources are used for education in the Grades 1 to 7 phase. (Entire combined schools, i.e. schools with some learners in Grades 1 to 7 and some learners in Grades 8 to 12, would be catered for here if the highest grade offered is Grade 8. No schools would be split across programmes, in other words.)
2.2	Public secondary schools	To provide specific public secondary	Includes all programme 2 expenditure items utilised in the schools themselves, or goods,

No.	*Programme/ Sub-programme*	*Objective of Programme/ Sub-Programme*	*Expenditure items and payments included and excluded*
		ordinary schools with resources required for the Grades 8 to 12 levels.	services or payments allocated to specific schools, e.g. educators provisioned through the post provisioning model and attached to institutions, or school-specific funds allocated through the Norms and Standards for School Funding, where these resources are used for education in the Grades 8 to 12 phase. (Entire combined schools, i.e. schools with some learners in Grades 1 to 7 and some learners in Grades 8 to 12, would be catered for here if the highest grade offered is Grades 9, 10, 11 or 12. No schools would be split across programmes, in other words.)
2.3	Professional Services	To provide educators and learners in public ordinary schools with departmentally managed support services.	Includes all programme 2 expenditure items utilised by educators and learners at schools where those expenditure items are not specifically and annually attached to the school, e.g. psychological counselling offered by district-based counsellors, advisors and support personnel promoting inclusive education or supporting ELSEN in ordinary schools, services offered from a teachers centre or a resource centre, and district-based learner assessment services. Excludes programme 2.4 services relating to human resource development, and professional services provided by the school itself using its sub-programme 2.1 or 2.2 resources.
2.4	Human resource development	To provide departmental services for the professional and other development of educators and non-educators in public ordinary schools.	Includes programme 2 expenditure items required for in-service training of schools-based staff, including the services of teacher trainers, and distance education acquired through bursaries offered to educators. Excludes HRD provided by the school itself using its sub-programme 2.1 or 2.2 resources.
2.5	In-school sport and culture	To provide additional and departmentally managed sporting and cultural activities in public ordinary schools.	Includes all programme 2 expenditure items used by the department to provide sporting and cultural activities in schools in addition to such activities offered by the school itself. Excludes: Sporting and cultural activities which are provided by the school itself using its sub-programme 2.1 or 2.2 resources.
2.6	Conditional grants	To provide for projects under programme 2 specified by the Department of Education and funded by conditional grants.	
3	**Independent school subsidies**	To support independent schools in accordance with the South African Schools Act.	Includes transfer payments to independent schools in accordance with the Norms and Standards for School Funding to support the provisioning of expenditure items required for education in those schools.
3.1	Primary phase	To support independent schools in the Grades 1 to 7 phase.	Includes programme 3 funding generated by Grades 1 to 7 learners in combined independent schools. In other words, individual independent schools would be split across sub-programmes if they are combined.
3.2	Secondary phase	To support independent schools in the Grades 8 to 12 phase.	Includes programme 3 funding generated by Grades 8 to 12 learners in combined independent schools.
4	**Public special school education**	To provide compulsory public education in special schools in accordance with the	Includes all publicly funded expenditure items specific to the provisioning of Grades R to 12 education public special schools. Both expenditure items purchased by the department, and

No.	*Programme/ Sub-programme*	*Objective of Programme/ Sub-Programme*	*Expenditure items and payments included and excluded*
		South African Schools Act and White Paper 6 on inclusive education.	those purchased by schools using transfer payments from the state are included here. Excludes: Expenditure items offered from special schools, but aimed primarily for utilisation by ordinary schools on a resource centre basis. These should be included under sub-programme 2.3.
4.1	Schools	To provide specific public special schools with resources.	Includes all programme 4 expenditure items utilised in the schools themselves, or goods, services or payments allocated to specific schools, e.g. educators provisioned through the post provisioning model and attached to institutions, or school-specific funds, where these resources are used for education in the Grades R to 12 phases. (There is no split between primary and secondary phases, and Grade R is included.)
4.2	Professional Services	To provide educators and learners in public special schools with departmentally managed support services.	Includes all programme 4 expenditure items utilised by educators and learners at schools where those expenditure items are not specifically and annually attached to the school, e.g. psychological counselling offered by district-based counsellors, services offered from a teachers centre or a resource centre, and district-based learner assessment services. Excludes programme 4.3 services relating to human resource development, and professional services provided by the school itself using its sub-programme 4.1 resources.
4.3	Human resource development	To provide departmental services for the professional and other development of educators and non-educators in public special schools.	Includes programme 4 expenditure items required for in-service training of schools-based staff, including the services of teacher trainers, and distance education acquired through bursaries offered to educators. Excludes HRD provided by the school itself using its sub-programme 4.1 resources.
4.4	In-school sport and culture	To provide additional and departmentally managed sporting and cultural activities in public special schools.	Includes all programme 4 expenditure items used by the department to provide sporting and cultural activities in schools in addition to such activities offered by the school itself. Excludes: Sporting and cultural activities which are provided by the school itself using its sub-programme 4.1 resources.
4.5	Conditional grants	To provide for projects under programme 4 specified by the Department of Education and funded by conditional grants.	
5	**Further Education and Training**	To provide Further Education and Training (FET) at public FET colleges in accordance with the Further Education and Training Act.	Includes all publicly funded expenditure items used for the provisioning of education in FET colleges and FET youth colleges. Both expenditure items purchased by the department, and transfer payments to colleges from the state are included here. Excludes all expenditure items offered to the FET band, i.e. Grades 10, 11 and 12, in public schools governed by the South African Schools Act.
5.1	Public institutions	To provide specific public FET colleges with resources.	Includes all programme 5 expenditure items utilised in the colleges themselves, or goods, services or payments allocated to specific colleges, e.g. educators provisioned through the post provisioning model and attached to institutions, or college-specific funds.
5.2	Youth colleges	To provide specific public youth colleges with resources.	Includes all programme 6 expenditure items for youth colleges.

No.	*Programme/ Sub-programme*	*Objective of Programme/ Sub-Programme*	*Expenditure items and payments included and excluded*
5.3	Professional Services	To provide educators and students in public FET colleges with departmentally managed support services.	Includes all programme 6 expenditure items offered to educators and students at FET colleges and youth colleges where those expenditure items are not specifically and annually attached to the college, e.g. psychological counselling offered by district-based counsellors, advisors and support personnel promoting inclusive education, services offered from a teachers centre or a resource centre, and district-based student assessment services. Excludes programme 5.4 services relating to educator human resource development.
5.4	Human resource development	To provide departmental services for the professional development of educators and non-educators in public FET colleges.	Includes programme 5 expenditure items required for in-service training of staff, including those acquired through bursaries offered to educators. Excludes HRD provided by the college itself using its sub-programme 5.1 resources.
5.5	In-college sport and culture	To provide additional and departmentally managed sporting and cultural activities in public FET colleges.	Includes all programme 5 expenditure items used by the department to provide sporting and cultural activities in colleges in addition to such activities offered by the college itself. Excludes: Sporting and cultural activities which are provided by the college itself using its sub-programme 5.1 resources.
5.6	Conditional grants	To provide for projects under programme 5 specified by the Department of Education and funded by conditional grants.	
6	**Adult Basic Education and Training**	To provide Adult Basic Education and Training (ABET) in accordance with the Adult Basic Education Act.	Includes all publicly funded expenditure items utilised at ABET sites to offer adults basic education and training. Both expenditure items purchased by the department, and any transfer payments from the state to ABET sites are included here.
6.1	Public centres	To provide specific public ABET sites with resources.	Includes all programme 6 expenditure items for public ABET sites.
6.2	Subsidies to private centres	To support specific private ABET sites through subsidies.	Includes transfer payments to private ABET sites to support the provisioning of ABET in those sites.
6.3	Professional Services	To provide educators and students in public ABET sites with departmentally managed support services.	Includes all programme 6 expenditure items utilised by educators and students at sites where those expenditure items are not specifically and annually attached to the site, e.g. psychological counselling offered by district-based counsellors, services offered from a teachers centre or a resource centre, and district-based student assessment services. Excludes programme 6.4 services relating to human resource development, and professional services provided by the school itself using its sub-programme 6.1 resources.
6.4	Human resource development	To provide departmental services for the professional and other development of educators and non-educators in public ABET sites.	Includes programme 6 expenditure items required for in-service training of staff based in ABET sites, including the services of teacher trainers, and distance education acquired through bursaries offered to educators. Excludes HRD provided by the site itself using its sub-programme 6.1 resources.
6.5	Conditional grants	To provide for projects under programme 6 specified by the Department of Education and funded by conditional	

No.	*Programme/ Sub-programme*	*Objective of Programme/ Sub-Programme*	*Expenditure items and payments included and excluded*
		grants.	
7	**Early Childhood Development**	To provide Early Childhood Education (ECD) at the Grade R and earlier levels in accordance with White Paper 5.	Includes all publicly funded expenditure items specific to Grade R and earlier levels at any sites or school. Both expenditure items purchased by the department, and transfer payment from the state are included here.
7.1	Grade R in public schools	To provide specific public ordinary schools with resources required for Grade R.	Includes all programme 7 expenditure items allocated to specific public schools.
7.2	Grade R in community centres	To support particular community centres at the Grade R level.	Includes transfer payments to community centres to support the provisioning of Grade R education in those centres.
7.3	Pre-Grade R	To provide particular sites with resources required for pre-Grade R.	Includes all programme 7 expenditure items, and transfer payments, aimed at the provisioning of education below the Grade R level, whether in public or private schools or sites.
7.4	Professional Services	To provide educators and learners in ECD sites with departmentally managed support services.	Includes all programme 7 expenditure items utilised by ECD practitioners, educators and learners at schools or sites where those expenditure items are not specifically and annually attached to the school or site, e.g. psychological counselling offered by district-based counsellors, services offered from a teachers centre or a resource centre, and district-based learner assessment services. Excludes programme 7.5 services relating to human resource development, and professional services provided by the site or school itself using its sub-programme 7.1 or 7.2 resources.
7.5	Human resource development	To provide departmental services for the professional and other development of educators and non-educators in ECD sites.	Includes programme 7 expenditure items required for in-service training of schools-based staff, including the services of teacher trainers, and distance education acquired through bursaries offered to educators. Excludes HRD provided by the school or site itself using its sub-programme 7.1 or 7.2 resources.
7.6	Conditional grants	To provide for projects under programme 7 specified by the Department of Education and funded by conditional grants.	
8	**Auxiliary and associated services**	To provide the education institutions as a whole with training and support.	Includes all funds utilised for support to institutions where they do not easily fall under any of the programmes from 2 to 7, or where they relate to departmentally run examinations.
8.1	Payments to SETA	To provide employee HRD in accordance with the Skills Development Act.	Includes transfer payments to the Sector Education and Training Authorities (SETAs).
8.2	Conditional grant projects	To provide for projects specified by the Department of Education that is applicable to more than one programme and funded with conditional grants.	Includes all goods, services and payments funded by conditional grants from the Department of Education. **As part of all planning and reporting relating to programmes, a separate table specifying individual conditional grant projects and their linkages to programmes and sub-programmes is required.**

No.	*Programme/ Sub-programme*	*Objective of Programme/ Sub-Programme*	*Expenditure items and payments included and excluded*
8.3	Special projects	To provide for special departmentally managed intervention projects in the education system as a whole.	Includes programme 8 expenditure items required for projects of a generic nature, e.g. HIV/AIDS awareness projects, and other advocacy campaigns relevant for the education system as a whole. **As part of all planning and reporting relating to programmes, a separate table specifying individual special projects is required.**
8.4	External examinations	To provide for departmentally managed examination services.	Includes expenditure items required for the Grade 12 or any other examinations in the education system, where the resources are managed centrally by the department, and not allocated to individual institutions.

2.4 Core statistical tables

2.4.1 Summary table

The following table provides a list of all the performance measures and the statistics in the core statistical tables.

The column "Annually" and "Quarterly" (this is indicated by ●) suggests which statistics and PMs should be annual and quarterised, some maybe both. The criteria used are the data availability/system or the activity been more strategic (e.g decreasing repetition rate) or operational (e.g school lunches).

There is a column that also indicates PMs and statistics that can be regarded as highly challenging. This is indicated with the ❋ symbol. This is in order to provide an indication of where systems development and capacity building is most urgently needed. There may be special surveys that are being run or systems specific to just a few provinces that will yield the required data, but overall there is a need for better and sustainable systems.

To do: The determination of what performance measures should be 'quarterised' is a key one. The need for quarterly reporting is to monitor compliance on service delivery outputs against quarterly targets (but not necessarily annual) in the Annual Performance Plans. One option is to include discussion of ANNUAL performance measures in the quarterly reports WITHOUT TRYING PROVIDE QUARTELY DATA. Another option is to actually require a quarterly collection/recalculation, but this should be undertaken with UTMOST CARE to ensure that requirements do not become impossible. The table below suggests performance measures and statistics, which should be annual and quarterised.

SUMMARY OF CORE STATISTICAL TABLES	Quarterly	Annually	Challenges
ST001: PROVINCIAL EDUCATION SECTOR			
STAFFING			
Number of Educators (publicly employed)	●		
Number of Non-educators (publicly employed)	●		
ENROLMENT AT COMPULSORY LEVEL			
Learners aged 7 to 14 in public ordinary schools		●	
Learners aged 7 to 14 in public special schools		●	
Learners aged 7 to 14 in independent schools		●	
TOTAL			
ENROLMENT AT POST-COMPULSORY LEVEL			
Learners aged 15 to 17 in public ordinary schools		●	
Learners aged 15 to 17 in public special schools		●	
Learners aged 15 to 17 in independent schools		●	
Students aged 15 to 17 in FET colleges		●	
TOTAL			
ENROLMENTS OVER POPULATION			
Age 7 to 14		●	
Age 15 to 17		●	
►**PERFORMANCE MEASURES**			
►PM001: Percentage of children of compulsory school going age that attend schools		●	
►PM002: Percentage of youths above compulsory school going age attending schools and other educational institutions		●	
►PM003: Public expenditure on the poorest learners as a percentage of public expenditure on the least poor learners		●	
►PM004: Years input per FETC graduate		●	❋
►PM005: Average highest school grade attained by adults in the population		●	
►PM006: Adult literacy rate		●	
ST101: ADMINISTRATION			
STAFFING			
Number of Educators (publicly employed)	●		
Number of Non-educators (publicly employed)	●		
STATISTICS ON ADMINISTRATION SYSTEMS			
Number of schools with SAMS (a)	●		
Number of schools with e-mail	●		
►**PERFORMANCE MEASURES**			
►PM101: Percentage of schools implementing the School Administration and Management System	●		
►PM102: Percentage of schools that can be contacted electronically by the department	●		
►PM103: Percentage of black women in senior management positions		●	
►PM104: Percentage of current expenditure going towards non-personnel items		●	

ST201: PUBLIC ORDINARY SCHOOLING	Quarterly	Annually	Challenges
EFFICIENCY STATISTICS			
Learners (a)			
Total possible learner days per learner (b)		●	
Total learner days lost due to absenteeism (c)		●	
Number of Educators (publicly employed) (d)	●		
Number of permanent educators who have left public ordinary schools (e)	●		
Attrition rate for permanent educators (e/d)	●		
Total possible working days per educator (f)		●	❋
Total working days lost due to educator absenteeism (g)		●	❋
Non-section 21 schools receiving LSMs by day one of the school year (h)		●	
INCLUSIVE EDUCATION STATISTICS			
Learners with high level special needs in public ordinary schools (i)		●	❋
SCHOOL NUTRITION STATISTICS			
Learners benefiting from the school nutrition programme (j)	●		❋
Programme reach in terms of average days per learner (k)		●	❋
SCHOLAR TRANSPORT STATISTICS			
Learners benefiting from scholar transport (l)	●		
►**PERFORMANCE MEASURES**			
►PM201: Percentage of learner days covered by the nutrition programme (j x k)/ (a x b)	●		❋
►PM202: Percentage of learners in public ordinary schools with special needs (i / a)		●	
►PM203: Percentage of public ordinary schools with a water supply	●		
►PM204: Percentage of public ordinary schools with electricity		●	
►PM205: Percentage of schools with an adequate number of functional toilets	●		
►PM206: Expenditure on maintenance as a percentage of the value of school infrastructure		●	❋
►PM207: Percentage of schools with more than 40 learners per class		●	
►PM208: Percentage of non-Section 21 schools with all LSMs and other required materials delivered on day one of the school year		●	
►PM209: Percentage of schools with Section 21 status		●	
►PM210: Percentage of working days lost due to educator absenteeism in public ordinary schools (g / (d x f))		●	❋
►PM211: Percentage of learner days lost due to learner absenteeism in public ordinary schools (c / (a x b))		●	❋
ST202: PUBLIC PRIMARY SCHOOLS			
STAFFING			
Number of Educators (publicly employed) (a)	●		
Number of Non-educators (publicly employed)	●		
ENROLMENT			
Learners in public primary schools (b)		●	
L:E ratio in public primary schools (b/a)		●	
Learners Grade 1 to Grade 7 (c)		●	

ST202: PUBLIC PRIMARY SCHOOLS (continued)	Quarterly	Annually	Challenges
of which disabled learners		●	
of which females		●	
Gender parity index		●	
ST202: PUBLIC PRIMARY SCHOOLS			
INSTITUTIONS & INFRASTRUCTURE			
Schools		●	
Number of schools with SASA Section 21 functions		●	
Number of schools declared no fee schools		●	
Number of schools with a water supply	●		
Number of schools with electricity	●		
Number of schools with an adequate number of functional toilets	●		
Classrooms (d)			
Learner/classroom ratio (b/d)		●	
Schools with more than 40 learners per class		●	
OUTPUT AND EFFICIENCY STATISTICS			
Number of Grade 3 learners sitting for standardised tests (e)		●	
Number of Grade 3 learners attaining acceptable outcomes (f)		●	❋
Number of Grade 6 learners sitting for standardised tests (g)		●	
Number of Grade 6 learners attaining acceptable outcomes (h)		●	❋
Number of Grades 1 to 7 learners repeating their grade (i)		●	
►PERFORMANCE MEASURES			
►PM212: The performance ratio of the least advantaged schools to the most advantaged schools with regard to Grade 3		●	❋
►PM213: Repetition rate in Grades 1 to 7 (i/c)		●	❋
►PM214: Percentage of learners in Grade 3 attaining acceptable outcomes in Numeracy and Literacy (f/e)		●	❋
►PM215: Percentage of learners in Grade 6 attaining acceptable outcomes in Mathematics, Literacy and Natural Sciences (h/g)		●	❋
ST203: PUBLIC SECONDARY SCHOOLS			
STAFFING			
Number of Educators (publicly employed) (a)	●		
Number of Non-educators	●		
ENROLMENT			
Learners in public secondary schools (b)		●	
L:E ratio in public primary schools (b/a)		●	
Learners Grade 8 to Grade 12 (c)		●	
of which disabled learners		●	
of which females (d)		●	
Gender parity index		●	
Females in Grades 8 to 12 taking both Mathematics and Science (e)		●	

ST203: PUBLIC SECONDARY SCHOOLS (continued)	Quarterly	Annually	Challenges
INSTITUTIONS & INFRASTRUCTURE			
Schools			
Number of schools with SASA Section 21 functions		●	
Number of schools declared no fee schools		●	
Number of schools with a water supply	●		
Number of schools with electricity	●		
Number of schools with an adequate number of functional toilets	●		
Number of schools with a Science laboratory	●		
Classrooms (f)			
Learner/classroom ratio (b/f)		●	
Schools with more than 40 learners per class		●	
OUTPUT AND EFFICIENCY STATISTICS			
Number of Grade 9 learners sitting for standardised tests (g)		●	
Number of Grade 9 learners attaining acceptable outcomes (h)		●	❋
Number of Grades 8 to 12 learners repeating their grade (i)		●	❋
Population of age 18 (j)		●	
Number of learners writing SC examinations (k)		●	
Number of learners passing SC examinations (l)		●	
Number of learners passing with endorsement		●	
SC pass rate (l/k)		●	
Number of SC candidates passing both Mathematics and Science (m)		●	
Number of schools writing SC examinations		●	
Number of schools with an SC pass rate below 40%		●	
SC pass rate of quintile 1 schools (n)		●	
SC pass rate of quintile 5 schools (o)		●	
►PERFORMANCE MEASURES			
►PM216: Percentage of girl learners who take Mathematics and Science in Grades 10 to 12 (e/d)		●	
►PM217: The performance ratio of the least advantaged schools to the most advantaged schools with respect to the grade 12 pass rate (n/o)		●	
►PM218: Repetition rate in Grades 8 to 12 (i/c)		●	❋
►PM219: Pass ratio in Grade 12 examinations (l/j)		●	
►PM220: Pass ratio in Grade 12 for Mathematics and Science (m/j)		●	
►PM221: Percentage of learners in Grade 9 attaining acceptable educational outcomes in all learning areas (h/g)		●	❋
ST301: INDEPENDENT SCHOOL SUBSIDIES			
STAFFING			
Number of Educators	●		
ENROLMENT			
Learners in independent schools receiving a subsidy	●		

ST301: INDEPENDENT SCHOOL SUBSIDIES (continued)	Quarterly	Annually	Challenges
3.1 Primary phase		●	
3.2 Secondary phase		●	
Learners in non-subsidised independent schools			
Grades 1 to 7		●	
Grades 8 to 12		●	
TOTAL (all independent school learners)			
INSTITUTIONS			
Schools receiving a subsidy (a)			
3.1 Primary phase		●	
3.2 Secondary phase		●	
Schools not receiving a subsidy		●	
TOTAL			
Subsidised schools visited during the year for monitoring purposes (b)	●		
►PERFORMANCE MEASURE			
►PM301: Percentage of funded independent schools visited for monitoring purposes (b/a)	●		
ST401: PUBLIC SPECIAL SCHOOL EDUCATION			
STAFFING			
Number of Educators (publicly employed)	●		
Number of Non-educators (publicly employed)	●		
ENROLMENT			
Grade 8 and above		●	
INSTITUTIONS & INFRASTRUCTURE			
Schools		●	
►PERFORMANCE MEASURES			
►PM401: Percentage of children with special needs aged 6 to 15 not enrolled in educational institutions		●	
ST501: FURTHER EDUCATION AND TRAINING			
STAFFING			
Educators	●		
In posts	●		
Employed by college	●		
Non-educators	●		
In posts	●		
Employed by college	●		
ENROLMENT			
Full-time equivalent students		●	
Students (headcount) (a)		●	
of which females		●	

ST501: FURTHER EDUCATION AND TRAINING (continued)	Quarterly	Annually	Challenges
of which females in technical fields (b)		●	
Students completing programmes successfully during the year (c)		●	
STATISTICS ON LEARNERSHIPS			
Active learnership agreements in the province (d)	●		
Number of agreements involving FET colleges as provider (e)	●		
ST501: FURTHER EDUCATION AND TRAINING			
►**PERFORMANCE MEASURES**			
►PM501: Number of FET students relative to youth in the province		●	
►PM502: Percentage of female students who are in technical fields (b/a)		●	
►PM503: FET college throughput rate (c/a)		●	✱
►PM504: Percentage of learners placed in learnerships through FET colleges (e/d)		●	
ST601: ADULT BASIC EDUCATION AND TRAINING			
STAFFING			
Number of Educators (publicly employed)	●		
Number of Non-educators (publicly employed)	●		
ENROLMENT			
GET level		●	
FET level		●	
TOTAL (a)			
POPULATION			
Population aged 18 to 60 (b)		●	
INSTITUTIONS			
Public centres		●	
►**PERFORMANCE MEASURES**			
►PM601: Number of ABET learners relative to adults in the province (a/b)		●	
ST701: EARLY CHILDHOOD DEVELOPMENT			
STAFFING			
Number of Educators (publicly employed)	●		
Number of Non-educators (publicly employed)	●		
ENROLMENT (PUBLICLY FUNDED ONLY)			
Grade R in public schools (a)		●	
Grade R in community centres (b)		●	
Pre-Grade R in public schools		●	
Pre-Grade R in community centres		●	
TOTAL			
POPULATION			
Population aged 5 (c)		●	

ST701: EARLY CHILDHOOD DEVELOPMENT (continued)	Quarterly	Annually	Challenges
►**PERFORMANCE MEASURES**			
►PM701: Percentage of learners in publicly funded Grade R ((a+b)/c))		●	

2.4.2 The structure of the core statistical tables

This section provides the structure for all the core statistical tables that are standardised nationally, and that are listed in the table in the previous section. Figures loosely based on the figures of Eastern Cape have been inserted into the tables in order to indicate how the values should be entered, e.g. whether they should be percentages or integers, and whether there should be decimal places.

Each statistical table may contain two types of footnotes:

- Footnotes beginning with "**Note:**" explain how the table should be interpreted. Any possibilities of ambiguity or confusion should be dealt with in these explanations.

- Footnotes beginning with "**Sources:**" explain where the data comes from. The examples in the tables that follow should be adequate to indicate how sources should be entered.

ST001	PROVINCIAL EDUCATION SECTOR – Key trends					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
REVENUE (thousand rands)						
Voted by legislature	9,000,000	10,000,000	11,000,000	12,000,000	13,000,000	14,000,000
Conditional grants	80,000	200,000	220,000	260,000	280,000	300,000
Donor funding	5,000	500	500	0	0	0
Other	25,000	30,000	30,000	30,000	30,000	30,000
TOTAL	9,110,000	10,230,500	11,250,500	12,290,000	13,310,000	14,330,000
PAYMENTS BY PROGRAMME (thousand rands)						
1 Administration	752,000	752,000	789,600	829,080	870,534	914,061
2 Public ordinary school education (see further split below)	5,412,100	5,902,000	6,503,000	7,009,000	7,504,000	8,037,000
3 Independent school subsidies	17,000	17,000	17,000	17,000	17,000	17,000
4 Public special school education	204,000	212,160	220,646	229,472	238,651	248,197
5 Further education and training	132,600	145,860	160,446	176,491	194,140	213,554
6 Adult Basic Education and Training	136,000	141,440	147,098	152,982	159,101	165,465
7 Early Childhood Development	27,385	28,480	29,620	30,804	32,037	33,318
8 Auxiliary and associated services						
TOTAL	6,681,085	7,198,940	7,867,410	8,444,829	9,015,462	9,628,594
PAYMENTS FOR PUBLIC ORDINARY SCHOOL EDUCATION						
2.1 Public primary schools	5,337,000	5,712,000	6,299,000	6,765,000	7,239,000	7,751,000
2.2 Public secondary schools	3,315,000	3,461,000	3,601,000	3,741,000	3,884,000	4,024,000
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
Current payment	9,402,187	9,746,368	10,201,143	10,558,216	8,207,696	8,719,698
Compensation of employees	8,591,119	9,009,348	9,448,066	9,788,294	6,930,102	7,373,563
Educators	7,987,786	8,382,030	8,789,978	9,103,977	6,379,077	6,790,327
Non-educators	603,333	627,317	658,088	684,317	551,025	583,236
Goods and services	811,068	737,020	753,077	769,922	1,277,594	1,346,135
Transfers and subsidies	121,048	86,014	95,080	105,204	111,052	121,124
Payments for capital assets	134,750	349,688	364,521	379,957	401,484	420,773
TOTAL	9,657,985	10,182,070	10,660,744	11,043,377	8,720,232	9,261,595
STAFFING						
Number of Educators (publicly employed)	501,667	512,467	536,792	560,984	586,083	612,133
Number of Non-educators (publicly employed)	191,333	194,417	204,248	214,395	224,979	236,020

ST001	PROVINCIAL EDUCATION SECTOR – Key trends (continued)					
ENROLMENT AT COMPULSORY LEVEL	*2003/04 Actual*	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
Learners aged 7 to 14 in public ordinary schools	1,500,000	1,600,000	1,500,000			
Learners aged 7 to 14 in public special schools	2,000	2,000	3,000			
Learners aged 7 to 14 in independent schools	5,000	5,000	6,000			
TOTAL	1,507,000	1,607,000	1,509,000			
ENROLMENT AT POST-COMPULSORY LEVEL						
Learners aged 15 to 17 in public ordinary schools	320,000	350,000	360,000			
Learners aged 15 to 17 in public special schools	1,000	1,000	1,000			
Learners aged 15 to 17 in independent schools						
Students aged 15 to 17 in FET colleges	1,500	1,500	1,500			
TOTAL	322,500	352,500	362,500			
POPULATION						
Population aged 7 to 14	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Population aged 15 to 17	530,000	530,000	530,000	530,000	530,000	530,000
►PERFORMANCE MEASURES						
►PM001: Percentage of children of compulsory school going age that attend schools	98%	99%	100%	100%	100%	100%
►►PM002: Percentage of youths above compulsory school going age attending schools and other educational institutions	65%	68%	70%	73%	75%	75%
►PM003: Public expenditure on the poorest learners as a percentage of public expenditure on the least poor learners	87%	89%	91%	93%	95%	97%
►PM004: Years input per FETC graduate	14.5	14.2	14.0	13.8	13.6	13.4
►PM005: Average highest school grade attained by adults in the population	5.4	5.6	5.8	6.0	6.2	6.4
►PM006: Adult literacy rate	76%	77%	78%	79%	80%	81%

Note: All the performance measures, except for PM003 and PM004, are based on household survey data. **Sources:** Provincial Budget Statement (2006) [2005/06 financial figures are revised estimates]; Persal [2005 and 2006 employee figures refer to July and February respectively]; EMIS [2006 enrolment figures are non-final estimates]; Population figures provided by DoE. The publicly employed staff figures in this table and all other key trends tables reflect a count of unique employees on Persal, regardless of employment status (e.g. regardless of whether permanent or temporary) at one point in the year. For this table, figures reflect the situation in <month and year>.
Note: The percentages for PM001 and PM002 are obtained from the General Household Survey and may differ slightly from enrolment over population reflected elsewhere.

Recommended footnotes must be inserted for all tables (as in previous table).

ST002	PROVINCIAL EDUCATION SECTOR – Age-specific enrolment rates (20??)						
	2.1 Public primary schools	*2.2 Public secondary schools*	*3 Independent schools*	*4 Special schools*	*5 FET colleges (headcount)*	*Population*	*Age-specific enrolment rate*
< Age 6	3,000	4,000	0	0	0		
Age 6	44,000	46,000	400	100	0	160,000	56.6%
Age 7	107,000	128,000	500	100	0	166,000	141.9%
Age 8	87,000	103,000	500	200	0	170,000	112.2%
Age 9	84,000	101,000	500	200	0	174,000	106.7%
Age 10	80,000	103,000	600	200	0	177,000	103.8%
Age 11	75,000	100,000	500	300	0	178,000	98.8%
Age 12	66,000	97,000	500	300	0	179,000	91.5%
Age 13	45,000	93,000	600	300	0	179,000	77.6%
Age 14	29,000	109,000	600	300	0	177,000	78.5%
Age 15	18,000	120,000	600	300	0	175,000	79.4%
Age 16	9,000	115,000	600	300	5,000	172,000	75.5%
Age 17	4,000	103,000	500	300	5,000	166,000	68.0%
Age 18	2,000	91,000	400	200	5,000	156,000	63.2%
> Age 18	1,000	130,000	0	0	23,000		
TOTAL (age 6 to 18)	650,000	1,309,000	6,800	3,100	15,000	2,229,000	89.0%

ST003	PROVINCIAL EDUCATION SECTOR - Resourcing effected via the Post Provisioning Norms (20??)				
Programmes/Purpose of posts	*Posts PL1*	*Posts PL2*	*Posts PL3*	*Posts PL4*	*Total*
Posts top-sliced before model is run	200	0	0	0	200
Posts distributed by model	53,500	9,100	6,010	710	69,320
2. Public ordinary school education	53,000	9,000	6,000	700	68,700
2.1 Public primary schools	30,000	5,000	2,000	500	37,500
Posts attached to schools	30,000	5,000	2,000	500	37,500
Posts not attached to schools	0	0	0	0	0
2.2 Public secondary phase	23,000	4,000	4,000	200	31,200
Posts attached to schools	23,000	4,000	4,000	200	31,200
Posts not attached to schools	0	0	0	0	0
4 Public special school education	500	100	10	10	620
TOTAL	53,700	9,100	6,010	710	69,520

Notes: Posts that are top sliced before the model is run are posts allocated for offices, colleges, ABET and special purposes e.g. poverty redress. The above figures exclude <number of posts> PL5 and PL6 posts which are allocated for management purposes.

ST004	PROVINCIAL EDUCATION SECTOR – Investment in staff skills development (20??)							
	Prog 1 Admin	*Prog 2 POS*	*Prog 3 Indep*	*Prog 4 Spec*	*Prog 5 FET*	*Prog 6 ABET*	*Prog 7 ECD*	*Total*
Expenditure (thousand R)								
Trainees	2,050	14,000	0	300	1,750	4,000	0	22,100
Educators	2,000	13,000	0	300	1,250	1,000	0	17,550
Curriculum change training		8,000		300	250			8,550
Other in-service training	2,000	3,000			500	1,000		6,500
HIV/AIDS training		2,000			500			2,500
Non-educators	50	1,000			500	3,000		4,550

Note: This table reflects all Departmental expenditure on the skills development of Department staff. It includes the cost of Department-employed trainers. The same educator may be counted twice, if for example an educator has been through curriculum and HIV/AIDS training during the year in question. However, the values in the row 'Educators' do *not* reflect any double counting of educators. See separate explanations in <section ??> of how the statistics in this table were calculated.

ST101 ADMINISTRATION - Key trends	2003/04 Actual	2004/05 Actual	2005/06 Estimated	2006/07 Estimated	2007/08 Estimated	2008/09 Estimated
PAYMENTS BY SUB-PROGRAMME (thousand rands)						
1.1 Office of the MEC	4,000	4,000	4,200	4,410	4,631	4,862
1.2 Corporate services	546,000	546,000	573,300	601,965	632,063	663,666
1.3 Education management	192,000	192,000	201,600	211,680	222,264	233,377
1.4 Human resource development	10,000	10,000	10,500	11,025	11,576	12,155
1.5 Conditional grants	0	0	0	0	0	0
1.6 Education Management Information System (EMIS)						
TOTAL	752,000	752,000	789,600	829,080	870,534	914,061
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
Current payment	700,000	700,000	735,000	771,750	810,338	850,854
Compensation of employees	400,000	400,000	420,000	441,000	463,050	486,203
Educators	266,667	266,667	280,000	294,000	308,700	324,135
Non-educators	133,333	133,333	140,000	147,000	154,350	162,068
Goods and services	300,000	300,000	315,000	330,750	347,288	364,652
Transfers and subsidies	0	0	0	0	0	0
Payments for capital assets	52,000	52,000	54,600	57,330	60,197	63,206
TOTAL	752,000	752,000	789,600	829,080	870,534	914,061
STAFFING						
Number of Educators (publicly employed)	2,222	2,222	2,333	2,450	2,573	2,701
Number of Non-educators (publicly employed)	1,905	1,905	2,000	2,100	2,205	2,315
STATISTICS ON ADMINISTRATION SYSTEMS						
Number of schools with SAMS (a)	804	850	875			
Number of schools with e-mail	324	547	780			
►PERFORMANCE MEASURES						
►PM101: Percentage of schools implementing the School Administration and Management System	13%	14%	14%	25%	30%	35%
►PM102: Percentage of schools that can be contacted electronically by the department	5%	9%	13%	15%	20%	50%
►PM103: Percentage of black women in senior management positions	40%	45%	50%	55%	60%	65%
►PM104: Percentage of current expenditure going towards non-personnel items	10%	8%	8%	8%	17%	17%

ST102	ADMINISTRATION – Expenditure by item (200??)							
	1 Admin	*2 POS*	*3 Indep*	*4 Spec*	*5 FET*	*6 ABET*	*7 ECD*	*8 Aux*
Current payments	0	0	0	0	0	0	0	0
Compensation of employees	0	0	0	0	0	0	0	0
CS educators	0	0	0	0	0	0	0	0
Salaries and wages	0	0	0	0	0	0	0	0
Social contributions	0	0	0	0	0	0	0	0
Non-educators	0	0	0	0	0	0	0	0
Salaries and wages	0	0	0	0	0	0	0	0
Social contributions	0	0	0	0	0	0	0	0
Goods and services	0	0	0	0	0	0	0	0
Inventory	0	0	0	0	0	0	0	0
Learning support material	0	0	0	0	0	0	0	0
Stationery and printing	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Consultants, contractors and special services	0	0	0	0	0	0	0	0
Equipment less than R5,000	0	0	0	0	0	0	0	0
Maintenance of buildings	0	0	0	0	0	0	0	0
Operating leases	0	0	0	0	0	0	0	0
Learner transport	0	0	0	0	0	0	0	0
Other goods and services	0	0	0	0	0	0	0	0
Interest and rent on land	0	0	0	0	0	0	0	0
Interest	0	0	0	0	0	0	0	0
Rent on land	0	0	0	0	0	0	0	0
Financial transactions in assets and liabilities	0	0	0	0	0	0	0	0
Unauthorised expenditure	0	0	0	0	0	0	0	0

ST102	ADMINISTRATION – Expenditure by item (200??) (continued)							
	1 Admin	*2 POS*	*3 Indep*	*4 Spec*	*5 FET*	*6 ABET*	*7 ECD*	*8 Aux*
Transfers and subsidies	0	0	0	0	0	0	0	0
Municipalities	0	0	0	0	0	0	0	0
Public corporations and private entities	0	0	0	0	0	0	0	0
Non-profit institutions	0	0	0	0	0	0	0	0
Section 21 schools	0	0	0	0	0	0	0	0
LTSM	0	0	0	0	0	0	0	0
Utilities	0	0	0	0	0	0	0	0
Maintenance	0	0	0	0	0	0	0	0
Service rendered	0	0	0	0	0	0	0	0
Other educational institutions	0	0	0	0	0	0	0	0
Households	0	0	0	0	0	0	0	0
Payments for capital assets	0	0	0	0	0	0	0	0
Buildings and other fixed structures	0	0	0	0	0	0	0	0
Buildings	0	0	0	0	0	0	0	0
Hostels	0	0	0	0	0	0	0	0
New schools	0	0	0	0	0	0	0	0
Additional classrooms	0	0	0	0	0	0	0	0
Other additions	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Other fixed structures	0	0	0	0	0	0	0	0
Machinery and equipment	0	0	0	0	0	0	0	0
Transport equipment	0	0	0	0	0	0	0	0
Other machinery and equipment	0	0	0	0	0	0	0	0
Software and other intangible assets	0	0	0	0	0	0	0	0
GRAND TOTAL	0	0	0	0	0	0	0	0

ST201	PUBLIC ORDINARY SCHOOLING - Key trends					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
PAYMENTS BY SUB-PROGRAMME (thousand rands)						
2.1 Public primary schools	5,337,000	5,712,000	6,299,000	6,765,000	7,239,000	7,751,000
2.2 Public secondary schools						
2.3 Professional services	30,000	12,000	13,000	13,000	14,000	15,000
2.4 Human resource development	23,000	1,000	1,000	1,000	1,000	1,000
2.5 In-school sport and culture	100	0	0	0	0	0
2.6 Conditional grants	22,000	177,000	190,000	230,000	250,000	270,000
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
Current payment	8,200,000	8,610,000	9,010,000	9,310,000	6,900,000	7,350,000
Compensation of employees	7,800,000	8,200,000	8,600,000	8,900,000	6,000,000	6,400,000
Educators	7,410,000	7,790,000	8,170,000	8,455,000	5,700,000	6,080,000
Non-educators	390,000	410,000	430,000	445,000	300,000	320,000
Goods and services	400,000	410,000	410,000	410,000	900,000	950,000
Transfers and subsidies	49,000	20,000	21,000	22,000	23,000	24,000
Payments for capital assets	50,000	250,000	260,000	270,000	280,000	290,000
TOTAL	8,299,000	8,880,000	9,291,000	9,602,000	7,203,000	7,664,000
EFFICIENCY STATISTICS						
Learners (a)	2,060,000	2,060,000	2,040,000	2,060,000	2,100,000	2,090,000
Total possible learner days per learner (b)	200	200	200			
Total learner days lost due to absenteeism (c)	14,420,000	13,184,000	13,056,000			
Number of Educators (publicly employed) (d)	66,000	65,000	66,000	65,000	65,000	63,000
Number of permanent educators who have left public ordinary schools (e)	45	60	70			
Attrition rate for permanent educators (e/d)	0%	0%	0%			
Total possible working days per educator (f)	208	208	208			
Total working days lost due to educator absenteeism (g)	254,800	239,616	246,272			
Non-section 21 schools receiving LSMs by day one of the school year (h)	908	976	1,044			
INCLUSIVE EDUCATION STATISTICS						
Learners with high level special needs in public ordinary schools (i)	4,100	4,208	4,316	4,424	4,532	
SCHOOL NUTRITION STATISTICS						
Learners benefitting from the school nutrition programme (j)	400,000	500,000	600,000	600,000	600,000	600,000
Programme reach in terms of average days per learner (k)	170	180	190	200	200	200
SCHOLAR TRANSPORT STATISTICS						
Learners benefiting from scholar transport (l)	90,000	95,000	102,000			

ST201	PUBLIC ORDINARY SCHOOLING - Key trends (continued)					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
►PERFORMANCE MEASURES						
►PM201: Percentage of learner days covered by the nutrition programme ((j x k)/ (a x b))	17%	22%	28%	30%	35%	40%
►PM202: Percentage of learners in public ordinary schools with special needs (i / a)	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
►PM203: Percentage of public ordinary schools with a water supply	69%	71%	73%	75%	77%	79%
►PM204: Percentage of public ordinary schools with electricity	47%	49%	51%	54%	56%	58%
►PM205: Percentage of schools with an adequate number of functional toilets	59%	62%	66%	71%	76%	89%
►PM206: Expenditure on maintenance as a percentage of the value of school infrastructure	0.8%	0.8%	1.1%	1.3%	1.5%	1.6%
►PM207: Percentage of schools with more than 40 learners per class	42%	40%	35%	30%	25%	20%
►PM208: Percentage of non-Section 21 schools with all LSMs and other required materials delivered on day one of the school year	60%	59%	60%			
►PM209: Percentage of schools with Section 21 status	25%	27%	29%	30%	32%	33%
►PM210: Percentage of working days lost due to educator absenteeism in public ordinary schools ((g / (d x f))	1.9%	1.8%	1.8%	1.5%	1.3%	1.1%
►PM211: Percentage of learner days lost due to learner absenteeism in public ordinary schools (c / (a x b))	3.5%	3.2%	3.2%	3.0%	2.8%	2.6%
Note: The numbers of schools with a water supply and electricity (used for PM203 and PM204) can be found in the tables on primary and secondary schools. **Sources:** Provincial Budget Statement (2006).						

ST202	PUBLIC PRIMARY SCHOOLS – Key trends					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
Current payment	6,008,000	6,469,000	6,920,000	7,412,000	6,008,000	6,469,000
Compensation of employees	5,350,000	5,620,000	6,010,000	6,440,000	5,350,000	5,620,000
Educators	5,082,500	5,339,000	5,709,500	6,118,000	5,082,500	5,339,000
Non-educators	267,500	281,000	300,500	322,000	267,500	281,000
Goods and services	658,000	849,000	910,000	972,000	658,000	849,000
Transfers and subsidies	21,000	21,000	24,000	24,000	21,000	21,000
Payments for capital assets	270,000	275,000	295,000	315,000	270,000	275,000
TOTAL	6,299,000	6,765,000	7,239,000	7,751,000	6,299,000	6,765,000
STAFFING						
Number of Educators (publicly employed) (a)	35,000	36,000	37,000	37,000	37,000	37,000
Number of Non-educators (publicly employed)	3,000	3,100	3,200	3,200	3,200	3,200
ENROLMENT						
Learners in public primary schools (b)	670,000	665,000	660,000	675,000	698,000	698,000
L:E ratio in public primary schools (b/a)	19.1	18.5	17.8	18.2	18.9	18.9
Learners Grade 1 to Grade 7 (c)	1,440,000	1,430,000	1,420,000	1,450,000	1,500,000	1,500,000
of which disabled learners	500	700	1,000	1,000	1,000	1,000
of which females	700,000	705,000	710,000	715,000	720,000	725,000
Gender parity index	0.92	0.95	0.97	0.95	0.90	0.91
INSTITUTIONS & INFRASTRUCTURE						
Schools	2,880	2,880	2,882	2,890	2,900	2,900
Number of schools with SASA Section 21 functions	308	400	450	500	550	600
Number of schools declared no fee schools	0	0	0	1,609	1,609	1,609
Number of schools with a water supply	1,800	1,858	1,917	1,980	2,045	2,103
Number of schools with electricity	1,166	1,224	1,282	1,344	1,407	1,465
Number of schools with an adequate number of functional toilets	1,752	1,801	1,850	2,000	2,100	2,500
Classrooms (d)	17,000	17,100	17,200	17,300	17,400	17,500
Learner/classroom ratio (b/d)	39.4	38.9	38.4	39.0	40.1	39.9
Schools with more than 40 learners per class	1,690	1,550	1,430	1,310	1,190	1,070
EXPENDITURE ON MAINTENANCE (thousand rands)						
Expenditure on school maintenance	29,000	33,000	44,000	55,000	66,000	77,000

ST202 PUBLIC PRIMARY SCHOOLS – Key trends (continued)	*2003/04 Actual*	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
Replacement value of all immobile school infrastructure	3,700,000	3,900,000	4,100,000	4,300,000	4,500,000	4,700,000
OUTPUT AND EFFICIENCY STATISTICS						
Number of Grade 3 learners sitting for standardised tests (e)	0	378	500	1,034	1,034	95,000
Number of Grade 3 learners attaining acceptable outcomes (f)	0	187	270	600	600	60,000
Number of Grade 6 learners sitting for standardised tests (g)	0	679	700	1,391	1,391	110,000
Number of Grade 6 learners attaining acceptable outcomes (h)	0	346	370	800	850	70,000
Number of Grades 1 to 7 learners repeating their grade (i)	180,000	164,450	149,100	137,750	127,500	112,500
►PERFORMANCE MEASURES						
►PM212: The performance ratio of the least advantaged schools to the most advantaged schools with regard to Grade 3	56%	58%	60%	62%	64%	66%
►PM213: Repetition rate in Grades 1 to 7 (i/c)	12.5%	11.5%	10.5%	9.5%	8.5%	7.5%
►PM214: Percentage of learners in Grade 3 attaining acceptable outcomes in Numeracy and Literacy (f/e)		49%	54%	58%	58%	63%
►PM215: Percentage of learners in Grade 6 attaining acceptable outcomes in Mathematics, Literacy and Natural Sciences (h/g)		51%	53%	58%	61%	64%

In ST202 and ST203 statistics that requires particular attention in terms of the definitions, are expenditure on maintenance and total value of school infrastructure. These statistics are included as they feed into one of the PMs.

Despite the general absence of standardised tests for grades 3, 6 and 9, a number of PMs refer to such tests, these tests are been developed according to DoE and PED plans.

ST203	PUBLIC SECONDARY SCHOOLS – Key trends					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
Current payment	3,200,000	3,320,000	3,440,000	3,560,000	3,680,000	3,800,000
Compensation of employees	3,000,000	3,100,000	3,200,000	3,300,000	3,400,000	3,500,000
Educators	2,850,000	2,945,000	3,040,000	3,135,000	3,230,000	3,325,000
Non-educators	150,000	155,000	160,000	165,000	170,000	175,000
Goods and services	200,000	220,000	240,000	260,000	280,000	300,000
Transfers and subsidies	15,000	21,000	21,000	21,000	24,000	24,000
Payments for capital assets	100,000	120,000	140,000	160,000	180,000	200,000
TOTAL	3,315,000	3,461,000	3,601,000	3,741,000	3,884,000	4,024,000
STAFFING						
Number of Educators (publicly employed) (a)	31,000	29,000	29,000	28,000	28,000	26,000
Number of Non-educators	3,000	3,000	3,000	3,000	3,000	3,000
ENROLMENT						
Learners in public secondary schools (b)	1,370,000	1,380,000	1,390,000	1,400,000	1,410,000	1,420,000
L:E ratio in public primary schools (b/a)	44.2	47.6	47.9	50.0	50.4	54.6
Learners Grade 8 to Grade 12 (c)	620,000	630,000	620,000	610,000	600,000	590,000
of which disabled learners	500	700	1,000	1,000	1,000	1,000
of which females (d)	300,000	310,000	310,000	310,000	310,000	310,000
Gender parity index	0.91	0.94	0.97	1.00	1.04	1.08
Females in Grades 8 to 12 taking both Mathematics and Science (e)	205,928	210,079	214,230	218,381	222,532	226,683
INSTITUTIONS & INFRASTRUCTURE						
Schools	3,265	3,265	3,270	3,280	3,290	3,290
Number of schools with SASA Section 21 functions	1,200	1,250	1,304	1,358	1,412	1,466
Number of schools declared no fee schools	0	0	0	2,045	2,045	2,045
Number of schools with a water supply	2,449	2,514	2,583	2,657	2,731	2,797
Number of schools with electricity	1,714	1,796	1,880	1,968	2,056	2,139
Number of schools with an adequate number of functional toilets	1,890	2,030	2,200	2,400	2,600	3,000
Number of schools with a Science laboratory	180	195	217	250	282	300
Classrooms (f)	29,000	30,000	31,000	32,000	33,000	34,000
Learner/classroom ratio (b/f)	47.2	46.0	44.8	43.8	42.7	41.8
Schools with more than 40 learners per class	908	896	709	522	335	148

ST203	PUBLIC SECONDARY SCHOOLS – Key trends (continued)					
EXPENDITURE ON MAINTENANCE (thousand rands)	*2003/04 Actual*	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
Expenditure on school maintenance	57,000	67,000	80,000	93,000	106,000	119,000
Replacement value of all immobile school infrastructure	4,700,000	5,000,000	5,300,000	5,600,000	5,900,000	6,200,000
OUTPUT AND EFFICIENCY STATISTICS						
Number of Grade 9 learners sitting for standardised tests (g)	0	500	1,000	30,000	30,000	30,000
Number of Grade 9 learners attaining acceptable outcomes (h)	0	300	600	24,000	24,000	24,000
Number of Grades 8 to 12 learners repeating their grade (i)	77,500	72,450	65,100	57,950	51,000	44,250
Population of age 18 (j)	170,000	175,000	175,000	175,000	175,000	175,000
Number of learners writing SC examinations (k)	80,000	80,000	80,000	80,000	80,000	80,000
Number of learners passing SC examinations (l)	35,700	37,100	37,450	37,800	38,150	38,500
Number of learners passing with endorsement	5,953	5,564	6,000	6,300	7,000	7,340
SC pass rate (l/k)	44.6%	46.4%	46.8%	47.3%	47.7%	48.1%
Number of SC candidates passing both Mathematics and Science (m)	7,200	7,387	7,574	7,761	7,948	8,135
Number of schools writing SC examinations	2,200	2,200	2,200	2,200	2,200	2,200
Number of schools with an SC pass rate below 40%	924	880	836	792	748	704
SC pass rate of quintile 1 schools (n)	22.7%	23.5%	24.3%	25.1%	25.9%	26.7%
SC pass rate of quintile 5 schools (o)	62.9%	64.8%	63.7%	63.0%	63.0%	63.0%
►PERFORMANCE MEASURES						
►PM216: Percentage of girl learners who take Mathematics and Science in grades 10 to 12 (e/d)	69%	68%	69%	70%	72%	73%
►PM217: The performance ratio of the least advantaged schools to the most advantaged schools with respect to the grade 12 pass rate (n/o)	36%	36%	38%	40%	41%	42%
►PM218: Repetition rate in Grades 8 to 12 (i/c)	13%	12%	11%	10%	9%	8%
►PM219: Pass ratio in Grade 12 examinations (l/j)	21.0%	21.2%	21.4%	21.6%	21.8%	22.0%
►PM220: Pass ratio in Grade 12 for Mathematics and Science(m/j)	4.2%	4.2%	4.3%	4.4%	4.5%	4.6%
►PM221: Percentage of learners in Grade 9 attaining acceptable educational outcomes in all learning areas (h/g)		60%	60%	80%	80%	80%
Note: PM216 counts participation in Mathematics and Science on both the HG and SG levels.						

ST204	PUBLIC ORDINARY SCHOOLING - Schools according to lowest and highest grade (20??)											
	Gr 1	*Gr 2*	*Gr 3*	*Gr 4*	*Gr 5*	*Gr 6*	*Gr 7*	*Gr 8*	*Gr 9*	*Gr 10*	*Gr 11*	*Gr 12*
Gr 1	3	9	190	361	164	724	1,231	90	2,288	9	1	54
Gr 2					2	4	3					
Gr 3				1			1					
Gr 4						4	9		2			3
Gr 5						2	81	3	1	1		1
Gr 6									1			
Gr 7									31	1		1
Gr 8									1	59	4	405
Gr 9												1
Gr 10												405
Gr 11												1
Gr 12												
						Total primary schools (prog. 2.1)		2,882	Sec. schools (prog. 2.2)			3,270

Note: This grades in the left-hand column indicate lowest grade available in each school, and the grades along the top row indicate the highest grade. **Sources:** Annual Survey of Schools (2003).

ST205	PUBLIC ORDINARY SCHOOLING - Enrolment and flow rate details (20??)					
	Learners 2002	*Learners 2003*	*Repeaters*	*Repeater rate*	*Dropouts*	*Dropout rate*
Gr 1	288,000	290,000	29,000	10.0%	58,000	20.0%
Gr 2	211,000	218,000	22,000	10.1%	28,000	12.8%
Gr 3	203,000	221,000	23,000	10.4%	27,000	12.2%
Gr 4	199,000	220,000	25,000	11.4%	26,000	11.8%
Gr 5	193,000	194,000	19,000	9.8%	23,000	11.9%
Gr 6	185,000	177,000	14,000	7.9%	21,000	11.9%
Gr 7	168,000	159,000	11,000	6.9%	19,000	11.9%
TOTAL GR 1 TO 7	1,447,000	1,479,000	143,000	9.7%	202,000	13.7%
Gr 8	155,000	164,000	22,000	13.4%	16,000	9.8%
Gr 9	137,000	137,000	18,000	13.1%	21,000	15.3%
Gr 10	150,000	129,000	26,000	20.2%	22,000	17.1%
Gr 11	104,000	103,000	22,000	21.4%	24,000	23.3%
Gr 12	70,000	72,000	13,000	18.1%	15,000	20.8%
TOTAL GR 8 TO 12	616,000	605,000	101,000	16.7%	98,000	16.2%

ST206	PUBLIC ORDINARY SCHOOLING - Educator and learner attendance (20??)			
	Headcount	*Potential learning and teaching days*	*Days lost*	*% days lost*
EDUCATORS				
2.1 Public primary schools	42,000	8,400,000	300,000	3.6%
2.2 Public secondary schools	42,001	8,400,200	300,001	3.6%
TOTAL	84,001	16,800,200	600,001	3.6%
LEARNERS				
2.1 Public primary schools	42,000	8,400,000	300,000	3.6%
2.2 Public secondary schools	42,001	8,400,200	300,001	3.6%
TOTAL	84,001	16,800,200	600,001	3.6%

ST207	PUBLIC ORDINARY SCHOOLING - Learner/educator ratios by quintile (20??)					
	Learners	*Publicly employed educators*	*Public L:E*	*Privately employed educators*	*Total educators*	*Effective L:E ratio*
2.1 Public primary schools	1,055,000	41,000	25.7	1,200	42,200	25.0
Quintile 1 (poorest)	202,000	9,000	22.4	100	9,100	22.2
Quintile 2	226,000	9,000	25.1	100	9,100	24.8
Quintile 3	228,000	9,000	25.3	100	9,100	25.1
Quintile 4	195,000	7,000	27.9	200	7,200	27.1
Quintile 5 (least poor)	204,000	7,000	29.1	700	7,700	26.5
2.1 Public secondary schools	1,196,000	14,000	85.4	700	14,700	81.4
Quintile 1 (poorest)	229,000	1,000	229.0	0	1,000	229.0
Quintile 2	257,000	1,000	257.0	0	1,000	257.0
Quintile 3	258,000	3,000	86.0	100	3,100	83.2
Quintile 4	221,000	4,000	55.3	100	4,100	53.9
Quintile 5 (least poor)	231,000	5,000	46.2	500	5,500	42.0

ST208	PUBLIC ORDINARY SCHOOLING - Resourcing effected via the School Funding Norms (20??)			
Programmes/Legal status/Poverty quintiles	*Schools*	*Total expenditure (thousand rands)*	*Learners*	*Expenditure per learner*
2.1 Public primary schools				
Non-Section 21 schools	2,881	116,000	982,000	118
Quintile 1 (poorest)	651	41,000	201,000	204
Quintile 2	638	30,000	219,000	137
Quintile 3	655	24,000	216,000	111
Quintile 4	597	16,000	185,000	86
Quintile 5 (least poor)	340	5,000	161,000	31
Section 21 schools	147	5,000	73,000	68
Quintile 1 (poorest)	12	1,000	1,000	1,000
Quintile 2	15	1,000	7,000	143
Quintile 3	23	1,000	12,000	83
Quintile 4	19	1,000	10,000	100
Quintile 5 (least poor)	78	1,000	43,000	23
TOTAL	3,028	121,000	1,055,000	115
2.2 Public secondary schools				
Non-Section 21 schools	3,269	132,000	1,114,000	118
Quintile 1 (poorest)	739	47,000	228,000	206
Quintile 2	723	34,000	249,000	137
Quintile 3	744	27,000	245,000	110
Quintile 4	678	18,000	210,000	86
Quintile 5 (least poor)	385	6,000	182,000	33
Section 21 schools	169	5,000	82,000	61
Quintile 1 (poorest)	14	1,000	1,000	1,000
Quintile 2	18	1,000	8,000	125
Quintile 3	27	1,000	13,000	77
Quintile 4	21	1,000	11,000	91
Quintile 5 (least poor)	89	1,000	49,000	20
TOTAL	3,438	137,000	1,196,000	115
Total for Non-section 21 schools	6,150	248,000	2,096,000	118
Total for Section 21 schools	316	10,000	155,000	65
Total for Quintile 1	1,416	90,000	431,000	209
Total for Quintile 2	1,394	66,000	483,000	137
Total for Quintile 3	1,449	53,000	486,000	109
Total for Quintile 4	1,315	36,000	416,000	87
Total for Quintile 5	892	13,000	435,000	30
GRAND TOTAL	6,466	258,000	2,251,000	115
Prog. 2 non-personnel non-capital budget		431,000		
Level of 'top-slicing'		40.1%		

ST301	INDEPENDENT SCHOOL SUBSIDIES - Key trends						
		2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
PAYMENTS BY SUB-PROGRAMME (thousand rands)							
3.1 Primary phase		10,000	10,000	10,000	10,000	10,000	10,000
3.2 Secondary phase		7,000	7,000	7,000	7,000	7,000	7,000
TOTAL		17,000	17,000	17,000	17,000	17,000	17,000
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)							
Current payment		0	17,000	17,000	17,000	17,000	17,000
Compensation of employees		0	0	0	0	0	0
Goods and services		0	0	0	0	0	0
Transfers and subsidies		17,000	17,000	17,000	17,000	17,000	17,000
Payments for capital assets		0	0	0	0	0	0
TOTAL		17,000	34,000	34,000	34,000	34,000	34,000
STAFFING							
Number of Educators		90	90	90			
ENROLMENT							
Learners in independent schools receiving a subsidy		2,500	2,500	2,500			
3.1 Primary phase		1,500	1,500	1,500			
3.2 Secondary phase		1,000	1,000	1,000			
Learners in non-subsidised independent schools		150	150	150			
Grades 1 to 7		100	100	100			
Grades 8 to 12		50	50	50			
TOTAL (all independent school learners)		2,650	2,650	2,650			
INSTITUTIONS							
Schools receiving a subsidy		40	40	40			
3.1 Primary phase		25	25	25			
3.2 Secondary phase		15	15	15			
Schools not receiving a subsidy		3	3	3			
TOTAL		43	43	43			
Subsidised schools visited during the year for monitoring purposes (b)		12	12	12	12	14	16
►PERFORMANCE MEASURE							
►PM301: Percentage of funded independent schools visited for monitoring purposes (b/a)		30%	30%	30%	30%	35%	40%

ST302	INDEPENDENT SCHOOL SUBSIDIES - Resourcing effected via the School Funding Norms (20??)			
Subsidy Level	*Schools*	*Total expenditure (thousand rands)*	*Learners*	*Expenditure per learner*
60 % (poorest)	8	6,009	650	9,244
40%	8	4,397	500	8,793
25%	8	3,517	500	7,034
15%	8	2,345	500	4,690
0% (least poor)	8	733	500	1,466
TOTAL	40	17,000	2,650	6,415

Note *Subsidy levels are related to fee levels on a five point progressive scale. Schools charging the lowest level will qualify for the highest level of the subsidy. Schools charging fees in excess of 2.5 times the separate provincial average estimates per learner in Primary or Secondary phases of public ordinary schools respectively, are considered to serve a highly affluent clientele, and 0% subsidy will be paid to them from public funds. Source : Notice 20 of 2003*

ST401	PUBLIC SPECIAL SCHOOL EDUCATION - Key trends					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
PAYMENTS BY SUB-PROGRAMME (thousand rands)						
4.1 Schools	200,000	208,000	216,320	224,973	233,972	243,331
4.2 Professional services	0	0	0	0	0	0
4.3 Human resource development	2,000	2,080	2,163	2,250	2,340	2,433
4.4 In-school sport and culture	0	0	0	0	0	0
4.5 Conditional grants	2,000	2,080	2,163	2,250	2,340	2,433
TOTAL	204,000	212,160	220,646	229,472	238,651	248,197
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
Current payment	193,000	200,720	208,749	217,099	225,783	234,814
Compensation of employees	170,000	176,800	183,872	191,227	198,876	206,831
Educators	120,000	124,800	129,792	134,984	140,383	145,998
Non-educators	50,000	52,000	54,080	56,243	58,493	60,833
Goods and services	23,000	23,920	24,877	25,872	26,907	27,983
Transfers and subsidies	0	0	0	0	0	0
Payments for capital assets	11,000	11,440	11,898	12,374	12,868	13,383
TOTAL	204,000	212,160	220,646	229,472	238,651	248,197
STAFFING						
Number of Educators (publicly employed)	1,200	1,200	1,200	1,200	1,200	1,200
Number of Non-educators (publicly employed)	500	510	520	530	540	550
ENROLMENT						
Up to and including Grade 7	4,000	4,000	4,000	4,000	4,000	4,000
Grade 8 and above	4,000	4,000	4,000	4,000	4,000	4,000
INSTITUTIONS & INFRASTRUCTURE						
Schools	44	44	44	44	44	44
►PERFORMANCE MEASURES						
►PM401: Percentage of children with special needs aged 6 to 15 not enrolled in educational institutions	11.0%	9.0%	8.0%	7.0%	6.0%	5.0%

ST501	FURTHER EDUCATION AND TRAINING - Key trends					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
5.1 Public institutions	130,000	143,000	157,300	173,030	190,333	209,366
5.2 Youth colleges	100	110	121	133	146	161
5.3 Professional services	0	0	0	0	0	0
5.4 Human resource development	2,000	2,200	2,420	2,662	2,928	3,221
5.5 In-college sport and culture	0	0	0	0	0	0
5.6 Conditional grants	500	550	605	666	732	805
TOTAL	132,600	145,860	160,446	176,491	194,140	213,554
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
Current payment	88,000	94,084	100,168	106,252	112,336	118,420
Compensation of employees	85,000	90,984	96,968	102,952	108,936	114,920
Educators	80,000	85,000	90,000	95,000	100,000	105,000
Non-educators	5,000	5,984	6,968	7,952	8,936	9,920
Goods and services	3,000	3,100	3,200	3,300	3,400	3,500
Transfers and subsidies	29,859	22,817	29,836	37,870	41,584	49,477
Payments for capital assets	14,741	28,959	30,442	32,369	40,220	45,656
TOTAL	132,600	145,860	160,446	176,491	194,140	213,554
STAFFING						
Educators	824	824	824	824	824	824
In posts	717	717	717	717	717	717
Employed by college	107	107	107	107	107	107
Non-educators	417	417	417	417	417	417
In posts	400	400	400	400	400	400
Employed by college	17	17	17	17	17	17
ENROLMENT						
Full-time equivalent students	12,000	13,000	14,000	15,000	16,000	17,000
Students (headcount) (a)	33,000	34,000	35,000	36,000	37,000	38,000
of which females	8,000	9,000	10,000	11,000	12,000	13,000
of which females in technical fields (b)	1,500	1,700	1,900	2,100	2,300	2,500
Students completing programmes successfully during the year (c)	21,000	22,000	23,000	24,000	25,000	26,000
STATISTICS ON LEARNERSHIPS						
Active learnership agreements in the province (d)	1,287	1,340	1,393	1,446	1,499	1,552
Number of agreements involving FET colleges as provider (e)	398	298	398	398	398	398

ST501	FURTHER EDUCATION AND TRAINING - Key trends (continued)					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
►PERFORMANCE MEASURES						
►PM501: Number of FET students relative to youth in the province	6%	6%	7%	7%	7%	7%
►PM502: Percentage of female students who are in technical fields (b/a)	19%	19%	19%	19%	19%	19%
►PM503: FET college throughput rate (c/a)	64%	65%	66%	67%	68%	68%
►PM504: Percentage of learners placed in learnerships through FET colleges (e/d)	31%	22%	29%	28%	27%	26%

ST601	ADULT BASIC EDUCATION AND TRAINING - Key trends					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
PAYMENTS BY SUB-PROGRAMME (thousand rands)						
6.1 Public centres	131,000	136,240	141,690	147,357	153,251	159,382
6.2 Subsidies to private centres	0	0	0	0	0	0
6.3 Professional services	0	0	0	0	0	0
6.4 Human resource development	5,000	5,200	5,408	5,624	5,849	6,083
6.5 Conditional grants	0	0	0	0	0	0
TOTAL	136,000	141,440	147,098	152,982	159,101	165,465
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
Current payment	136,000	141,440	147,098	152,982	159,101	165,465
Compensation of employees	115,000	119,600	124,384	129,359	134,534	139,915
Educators	100,000	104,000	108,160	112,486	116,986	121,665
Non-educators	15,000	15,600	16,224	16,873	17,548	18,250
Goods and services	21,000	21,840	22,714	23,622	24,567	25,550
Transfers and subsidies	0	0	0	0	0	0
Payments for capital assets	0	0	0	0	0	0
TOTAL	136,000	141,440	147,098	152,982	159,101	165,465
STAFFING						
Number of Educators (publicly employed)	2,550	2,550	2,550	2,550	2,550	2,550
Number of Non-educators (publicly employed)	120	120	120	120	120	120
ENROLMENT						
GET level	45,000	45,000	45,000	45,000	45,000	45,000
FET level	3,000	3,000	3,000	3,000	3,000	3,000
TOTAL (a)	48,000	48,000	48,000	48,000	48,000	48,000
POPULATION						
Population aged 18 to 60 (b)	3,050,000	3,050,000	3,050,000	3,050,000	3,050,000	3,050,000
INSTITUTIONS						
Public centres	142	142	142	142	142	142
►PERFORMANCE MEASURES						
►PM601: Number of ABET learners relative to adults in the province (a/b)	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%

ST701	Early Childhood Development- Key trends					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
PAYMENTS BY SUB-PROGRAMME (thousand rands)						
7.1 Grade R in public schools	19,000	19,760	20,550	21,372	22,227	23,116
7.2 Grade R in community centres	42	44	45	47	49	51
7.3 Pre-Grade R	0	0	0	0	0	0
7.4 Professional services	38	40	41	43	44	46
7.5 Human resource development	485	504	525	546	567	590
7.6 Conditional grants	7,820	8,133	8,458	8,796	9,148	9,514
TOTAL	27,385	28,480	29,620	30,804	32,037	33,318
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
Current payment	2,187	2,274	2,365	2,460	2,558	2,661
Compensation of employees	119	124	129	134	139	145
Educators	119	124	129	134	139	145
Non-educators	0	0	0	0	0	0
Goods and services	2,068	2,151	2,237	2,326	2,419	2,516
Transfers and subsidies	25,189	26,197	27,244	28,334	29,468	30,646
Payments for capital assets	9	9	10	10	11	11
TOTAL	27,385	28,480	29,620	30,804	32,037	33,318
STAFFING						
Number of Educators (publicly employed)	2	2	2	2	2	2
Number of Non-educators (publicly employed)	0	0	0	0	0	0
ENROLMENT (PUBLICLY FUNDED ONLY)						
Grade R in public schools (a)	1,200	3,000	5,000	7,000	9,000	11,000
Grade R in community centres (b)	24,000	24,000	24,000	24,000	24,000	24,000
Pre-Grade R in public schools	0	0	0	0	0	0
Pre-Grade R in community centres	0	0	0	0	0	0
TOTAL	25,200	27,000	29,000	31,000	33,000	35,000
POPULATION						
Population aged 5 (c)	168,000	168,000	168,000	168,000	168,000	168,000
►PERFORMANCE MEASURES						
►PM701: Percentage of learners in publicly funded Grade R ((a+b)/c)	15.0%	16.1%	17.3%	18.5%	19.6%	20.8%

ST801	Auxiliary and Associated Services - Key trends					
	2003/04 Actual	*2004/05 Actual*	*2005/06 Estimated*	*2006/07 Estimated*	*2007/08 Estimated*	*2008/09 Estimated*
PAYMENTS BY SUB-PROGRAMME (thousand rands)						
8.1 Payments to SETA	10,000	10,400	10,816	11,249	11,699	12,167
8.2 Conditional grant projects	12,000	12,480	12,979	13,498	14,038	14,600
8.3 Special projects	0	0	0	0	0	0
8.4 External examinations	68,000	70,720	73,549	76,491	79,550	82,732
TOTAL	90,000	93,600	97,344	101,238	105,287	109,499
PAYMENTS BY ECONOMIC CLASSIFICATION (thousand rands)						
Current payment	83,000	86,320	89,773	93,364	97,098	100,982
Compensation of employees	21,000	21,840	22,714	23,622	24,567	25,550
Educators	11,000	11,440	11,898	12,374	12,868	13,383
Non-educators	10,000	10,400	10,816	11,249	11,699	12,167
Goods and services	62,000	64,480	67,059	69,742	72,531	75,432
Transfers and subsidies	0	0	0	0	0	0
Payments for capital assets	7,000	7,280	7,571	7,874	8,189	8,517
TOTAL	90,000	93,600	97,344	101,238	105,287	109,499

2.4.3 Data to be provided by DoE

From a cost perspective, it makes sense for the DoE to provide PEDs with some of the data required for the completion of statistical tables. This is particularly so where demographic data must be obtained from StatsSA, or some other kind of collaboration with StatsSA is required).

The following data will be provided by the DoE to PEDs:

Population by province and age

- **Description:** Population.
- **Disaggregation:** By…

  Province

  Age [single age bins 0 to 20, thereafter five-year age bins starting from 21-25 to 61-65, thereafter one age bin 66 and above]

  Year [from 1990 to five years into the future]

- **Derivation:** Figures will be obtained, as far as possible, from StatsSA. Where necessary, projections for future years to be undertaken by a qualified demographer.
- **Transfer:** DoE will provide figures to PEDs on an annual basis in time for incorporation into the APP.

Illiterate adults

- **Description:** Illiterate adults.
- **Disaggregation:** By…

  Province

  Five-year age bins [from 21-25 to 61-65, thereafter one age bin 66 and above].

- **Derivation:**
- **Transfer:**

2.5 Core measurable objectives and performance measures

The grid that follows presents the core measurable objectives and performance measures agreed upon during 2005. There are altogether 30 measurable objectives and 39 performance measures. Where performance measures are percentages, the underlying raw values are captured in the relevant statistical table.

The symbol ** indicates that the data for the PM is to be sourced by the DoE, generally through extraction of data from StatsSA household surveys. The symbol *

indicates that some data needed for the PM in question, generally demographic data, is to be provided to PEDs by the DoE.

Note that this set of performance measures is informed by the request of the Task Team that these should be reduced in number. Hence there are fewer performance measures per programme than was the case in the 2002 specifications.

There was a concern that percentages in the performance measures would be meaningless if it is was not clear what the underlying raw numbers were. The approach taken here has been to express many performance measures as percentages (this is often necessary for comparison across time and between provinces to be possible), but to always include underlying raw values in the statistical tables.

CORE MEASURABLE OBJECTIVES (❋) AND CORE PERFORMANCE MEASURES (►)						
	Access	*Adequacy*	*Equity*	*Efficiency*	*Output*	*Quality*
Sector	❋ To ensure that the population of compulsory school-going age in the province attends schools. ►PM001: Percentage of children of compulsory school going age that attend schools** ❋ To make education progressively available to youth and adults above compulsory school-going age. ►PM002: Percentage of youths above compulsory school going age attending schools and other educational institutions **		❋ To ensure that overall the poor are favoured in the public resourcing of education. ►PM003: Public expenditure on the poorest learners as a percentage of public expenditure on the least poor learners*	❋ To reach a point where educational outcomes are maximised in terms of access and quality given the available education budgets. ►PM004: Years input per FETC graduate	❋ To ensure that the output of graduates from the education system is in line with economic and social needs. ►PM005: Average highest school grade attained by adults in the population**	❋ To build a society that is literate. ►PM006: Adult literacy rate**
Prog. 1				❋ To bring about effective management at all levels of the education system. ►PM101: Percentage of schools implementing the School Administration and Management System ►PM102: Percentage of schools that can be contacted electronically by the department ►PM103: Percentage of		

CORE MEASURABLE OBJECTIVES (❋) AND CORE PERFORMANCE MEASURES (►)						
	Access	*Adequacy*	*Equity*	*Efficiency*	*Output*	*Quality*
				black women in senior management positions ❋ To realise an optimal distribution of financial, physical and human resources across the system. ►PM104: Percentage of current expenditure going towards non-personnel items		
Prog. 2	❋ To provide access in the public ordinary schooling system in accordance with policy. ►PM201: Percentage of learner days covered by the nutrition programme ►PM202: Percentage of learners in public ordinary schools with special needs	❋ To put the basic infrastructure for public ordinary schooling in place in accordance with policy. ►PM203: Percentage of public ordinary schools with a water supply ►PM204: Percentage of public ordinary schools with electricity ►PM205: Percentage of schools with an adequate number of functional toilets ►PM206: Expenditure on maintenance as a percentage of the value of school infrastructure ❋ To provide adequate human resourcing in public ordinary schools. ►PM207: Percentage of schools with more than 40 learners per class		❋ To bring about effective and efficient self-managing public ordinary schools. ►PM209: Percentage of schools with Section 21 status ❋ To foster a culture of effective learning and teaching in public ordinary schools. ►PM210: Percentage of working days lost due to educator absenteeism in public ordinary schools ►PM211: Percentage of learner days lost due to learner absenteeism in public ordinary schools		

CORE MEASURABLE OBJECTIVES (❋) AND CORE PERFORMANCE MEASURES (►)						
	Access	*Adequacy*	*Equity*	*Efficiency*	*Output*	*Quality*
		❋ To provide adequate Learner Teacher Support Materials to public ordinary schools ►PM208: Percentage of non-Section 21 schools with all LSMs and other required materials delivered on day one of the school year				
Prog. 2.1			❋ To close the gap between the educational outcomes of the historically advantaged and disadvantaged in public primary schools. ►PM212: The performance ratio of the least advantaged schools to the most advantaged schools with regard to Grade 3**	❋ To ensure that the progression of learners through public primary schools is optimal. ►PM213: Repetition rate in Grades 1 to 7		❋ To attain the highest possible educational outcomes amongst learners in public primary schools. ►PM214: Percentage of learners in Grade 3 attaining acceptable outcomes in Numeracy and Literacy ** ►PM215: Percentage of learners in Grade 6 attaining acceptable outcomes in Mathematics, Literacy, and Natural Sciences **
Prog 2.2			❋ To promote the participation of historically marginalised groups of learners in public secondary schools. ►PM216: Percentage of girl learners who take Mathematics and Science in grades 10 to 12	❋ To ensure that the progression of learners through public secondary schools is optimal. ►PM218: Repetition rate in Grades 8 to 12	❋ To ensure that an adequate proportion of the population attains Grade 12, in particular with Mathematics and Science passes. ►PM219: Pass ratio in Grade 12 examinations* ►PM220: Pass ratio in Grade 12 for Mathematics and	❋ To attain the highest possible educational outcomes amongst learners in public secondary schools. ►PM221: Percentage of learners in Grade 9 attaining acceptable educational outcomes in all learning areas

CORE MEASURABLE OBJECTIVES (❋) AND CORE PERFORMANCE MEASURES (►)						
	Access	*Adequacy*	*Equity*	*Efficiency*	*Output*	*Quality*
			❋ To close the gap between educational outcomes of the historically advantaged and disadvantaged in public secondary schools. ►PM217: The performance ratio of the least advantaged schools to the most advantaged schools with respect to the grade 12 pass rate		Science*	
Prog. 3						❋ To ensure that quality education occurs in independent schools. ►PM301: Percentage of funded independent schools visited for monitoring purposes
Prog. 4	❋ To provide access in special schools in accordance with policy and the principles of inclusive education. ►PM401: Percentage of children with special needs aged 6 to 15 not enrolled in educational institutions**					
Prog. 5	❋ To expand the FET college sector in terms of the economic and social needs of the country. ►PM501: Number of		❋ To promote the participation by historically marginalised groups in public FET institutions. ►PM502: Percentage of		❋ To improve the success rate in the FET college sector ►PM503: FET college throughput rate	❋ To provide relevant and responsive quality FET learning opportunities ►PM504: Percentage of learners placed in

CORE MEASURABLE OBJECTIVES (❋) AND CORE PERFORMANCE MEASURES (►)						
	Access	*Adequacy*	*Equity*	*Efficiency*	*Output*	*Quality*
	FET college students relative to youth in the province*		female students who are in technical fields			learnerships through FET colleges
Prog. 6	❋ To ensure that adults without basic education access to ABET centres. ►PM601: Number of ABET learners relative to adults in the province*					
Prog. 7	❋ To provide publicly funded Grade R in accordance with policy. ►PM701: Percentage of learners in publicly funded Grade R*					

2.5.1 Number of performance measures

The small table below sums up the distribution of the 25??? performance measures across programmes and type (programme 0 means the provincial education sector as a whole). As discussed in 1.3.5 above, it is important to carefully assess the number of PMs (and MOs). We should not exceed 30 MOs and 30 PMs.

Programmes>>>	*0*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*TOT*
Access	2		2		1	1	1	1		4
Adequacy			6							6
Equity	1		3			1				5
Efficiency	1	4	5							10
Output	1		2			1				4
Quality	1		3	1		1				6
TOTAL	6	4	21	1	1	4	1	1		39
% of programme-specific PMs		12%	64%	3%	3%	12%	3%	3%	0%	100%
% of expenditure		7%	84%	1%	3%	2%	1%	1%	2%	100%

2.5.2 The six categories of MOs and PMs

The categories access, adequacy, equity, efficiency, output and quality have been selected as being appropriate for education planning. The meanings of each of these terms, as applied in this document, are as follows:

Access

Indicators of access tell us to what extent Government services are reaching the people being targeted for those specific services. It is assumed that the targeting is policy-driven, and designed to promote the overall equity, growth and development priorities of Government. Access indicators are underpinned by clear definitions of who is being targeted, and how recipients of the service should be counted, given that recipients may only receive the service some of the time. The net enrolment rate (NER), which is learners of the appropriate age enrolled in institutions divided by the population of that age, is a commonly used indicator of access.

Adequacy

Indicators of adequacy focus on how adequate the service is in terms of the basic inputs needed to deliver the service. These indicators tell us whether the service passes minimum standards of decency and whether service sites are 'fit for purpose'. The presence of a water and electricity supply, and of toilets, are common adequacy indicators relating to schools.

Equity

Indicators of equity tell us how pro-poor service delivery is. These indicators are often complex statistics that require information about the socio-economic background of service recipients, so that it is possible to gauge whether Government services are being targeted to those least able to afford those services through private means. Equity indicators also focus on the correcting of historical inequalities relating to race, gender and disability. The concentration index is one commonly used indicator of progressivity, or pro-poor service delivery.

Efficiency

Indicators of efficiency gauge how effectively Government translates limited financial and human resources into quality services. These indicators should assist us in knowing whether we can obtain more from the same resource envelope. In education, repetition rates and dropout rates are regarded as key efficiency indicators as schooling systems typically waste valuable resources as a result of these phenomena.

Output

Indicators of output deal with the number of learners and students attaining particular levels of education, for example the completion of the FET band. Output is thus closely linked to questions of access and efficiency. The more who have access to the service, and the greater the efficiency of the service, the greater the output. The Senior Certificate pass rate is a popular output indicator.

Quality

Indicators of quality go beyond just examining the level of output of the education system, and focus on how well the education system empowers people to face challenges in the labour market, on a personal level, and as citizens of a democratic country. The Numeracy skills of young learners and the functional literacy levels of the adult population are two commonly used indicators of quality.

Note there are a number of interpretations of the six categories of MOs and PMs, for example the PFMA does make mention and define the efficiency category. UNESCO also defines the above categories. The interpretations may differ from one document to the other. We have used the PFMA, UNESCO and other background documents in the definitions. However, these terms are in line with education planning and are obviously open for further revision.

2.5.3 Background on the Performance Measures

2.5.4 Specifications of individual core performance measures

The way the definitions are expressed in this section is based partly on UNESCO's *Education indicators: Technical guidelines* (UNESCO 2003). The basic definition and purpose for each PM is intended to be simple enough to publish for public consumption. However, the rest of the specifications are intended primarily for use by Departmental analysts or technically inclined readers amongst the public. Formulas are provided both in terms of symbols and operators (in the interests of complete accuracy) and in terms of a short textual description (in the interests of more general clarity).

There are instances where the basic definition and the more detailed specifications deviate somewhat. There are good reasons for this. It might be necessary to make the basic definition more understandable to the general public. There may be technical difficulties in obtaining data that exactly matches the basic definition. This should not present a problem. The important thing would be for the same methodology to be used in all provinces, and across all years, so comparison is possible. It would also be important to make the detailed specifications widely available to a more technically audience, so that any doubts and confusion can be dispelled.

►PM001: Percentage of the children of compulsory school going age that attend schools

Definition and purpose

This is the percentage of the children of compulsory school going age in the province attending any school or educational institution. This performance measure indicates how effectively the educational rights of children, as expressed in the Constitution, are being fulfilled, and the degree to which the provisions of the South African Schools Act referring to compulsory schooling are being complied with.

Further specifications

For non-census years, the data is based on sample data derived from Stats SA household surveys (obtained by DoE).

Given that according to policy *no* child aged 7 to 14 should be outside the education system, the range that is to be used in the calculation is 7 to 14. Having some children aged 6 or 15 outside the education system is not necessarily a policy failure, and hence these ages are excluded. The was the PM is constructed makes it possible for us to say that any value below 100% is a serious policy and constitutional failure.

According to SASA learners should enrol in grade one in the year they turn seven. Subsequent amendments in the Education Laws Amendment Act (no 50 of 2002) make provision for the fact that some learners may enrol in the year that they turn six. If a learner turns 6 in June 2004, one would expect this learner to enrol in school in January 2005. Hence, it is not a policy failure if this learner is out of school while he/she is 6 until December 2004. Similarly, if a learner turns 15 in June of 2005 he or she will be expected to be in school until December 2005 to complete compulsory schooling. For the first 6 months of 2006 this learner will still be 15 years of age and out of school (if he/she chose to leave school) without implying a policy failure in the strict sense on the part of the Department of Education.

Background

The data source suggested in this version of the manual differs from the data sources prescribed in 2002. Please take into account that the NER might not be comparable to the NER of previous years.

Previously it was suggested that the number of learners in schools be extracted from the Annual Survey of Schools and that it should be expressed as a percentage of all learners in that age bracket as contained within the mid-year population estimates from Stats SA. Calculating the NER from the General Household Survey has fewer data limitations and is therefore preferred.

Formula

$$NER_{7-14} = \frac{E_{7-14}}{P_{7-14}} * 100$$

Where

NER_{7-14} is net enrolment rate for ages 7 to 14.

E_{7-14} is population aged 7 to 14 enrolled in any educational institution.

P_{7-14} is population aged 7 to 14.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

For Eastern Cape the NER_{7-14} is calculated as follow:

$$E_{7-14} = 1{,}367{,}786$$

$$P_{7-14} = 1{,}421{,}279$$

Note that these values are derived from the weighted sample data and therefore look like population values for Eastern Cape. If the unweighted totals were used, E would have been 3002 and P would have been 3110. When weighting is applied, the sample values are multiplied by the weight to give an approximation of the value for the total population of 7-14 year olds in the EC. It is important to use the weighted approximations rather than the unweighted sample data for the reasons explained in Data sampling concepts

$$NER_{7-14} = \frac{1{,}367{,}786}{1{,}421{,}279} * 100 = 96.2\%$$

Data Source

For non-census years the Stats SA General Household Survey (GHS) data applicable to the year in question should be used for both the numerator and denominator.

Interpretation

It should be emphasised that the data is sample data, so it would have a margin of error associated with it. The policy target should clearly be a 100% value for this PM across all years. Values falling short of this target should be interpreted with reference to the various factors that keep children of compulsory school-going age out of school. In particular, disabled children tend to have low access to schooling.

Overlap with other indicators

The UNESCO Indicator "Net Enrolment Ratio" overlaps with this indicator. UNESCO is interested in the enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population. This indicator is also similar to the "Age Specific Enrolment Ratio" since it defines a specific age band.

►PM002: Percentage of youths above compulsory school going age attending schools and other educational institutions

Definition and purpose

This is similar to PM001, except that this performance measure refers to older children. This is the percentage of the population in the province aged 15 to 17 attending any school or other educational institutions. It indicates how successful government and the country are in providing schooling and other education beyond the basic education level. Whilst the Constitution does not make education for this age group a basic right, it obliges government to make further education progressively available and accessible for our youth.

Further specifications

For non-census years, the data is based on sample data derived from Stats SA household surveys (obtained by DoE).

This indicator tracks the enrolment of learners that would usually be expected to be busy with education at the FET level. Since compulsory education ceases at the age of 15 years or at the level of Grade 9, we would not necessarily expect a 100% enrolment rate. The higher the enrolment rate, however, the better.

In order to be consistent with PM001 however, the bottom limit used for this calculation is 15 years. Since one would expect to have three age cohorts enrolled in education at FET level, the top limit for this calculation is 17 years.

Background

The issue of learner repeater rates at grade 11 and 12 level is a contentious one that has an impact on the results of this indicator. If high repeater rates are encountered, this would push the value of this PM up.

The data source suggested in this version of the manual differs from the data sources prescribed in 2002. Please take into account that the NER might not be comparable to the NER of previous years. Previously it was suggested that the number of learners in schools be extracted from the Annual Survey of Schools and that it should be expressed as a percentage of all learners in that age bracket as contained within the mid-year population estimates from Stats SA. Calculating the NER from the General Household Survey has fewer data limitations and is therefore preferred.

Formula

$$NER_{15–17} = \frac{E_{15–17}}{P_{15–17}} * 100$$

where

$NER_{15–17}$ is net enrolment rate for ages 15 to 17.

$E_{15–17}$ is population aged 15 to 17 enrolled in any educational institution.

$P_{15–17}$ is population aged 15 to 17

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

For Eastern Cape the $NER_{15–17}$ is calculated as follow:

$$E_{15–17} = 505{,}867 \qquad P_{15–17} = 439{,}641$$

$$NER_{15–17} = \frac{439{,}641}{505{,}867} * 100 = 86.9\%$$

Data source

For non census years, the Stats SA General Household Survey (GHS) data applicable to the year in question should be used for both the numerator and the denominator.

Interpretation

Since the focus of this PM is to indicate how successful government is in progressively making FET education available, it is appropriate to compare current values with past values and set targets for future based on current enrolment rates. The policy target should be to increase the NER in this age bracket from year to year. Aspects such as participation rates for learners in rural areas and female learners might impact this PM.

Care should be taken when comparisons between different years' results are made. This is for two reasons: Firstly it is important to note that calculations conducted according to the 2002 manual, used different data sources. To do comparisons with previous years, it is recommended that the historical values are recalculated in line with this specification. Secondly, it should be emphasised that the data is sample data, so it would have a margin of error associated with it. The sampling error should be taken into account when making conclusions that one years' NER improved or declined.

Overlap with other indicators

The UNESCO Indicator "Age Specific Enrolment Ratio" overlaps somewhat with this PM. The UNESCO indicator would look at each one-year age cohort, while this PM looks at a cohort consisting of three years.

►PM003: Public expenditure on the poorest learners as a percentage of public expenditure on the least poor learners

Definition and Purpose

This is government's expenditure on the poorest one-fifth of learners as a percentage of government's expenditure on the least poor one-fifth. During the last years of apartheid, the percentage was around 20%, in other words, for every R1 that was spent on the non-poor learners, R0.20 was spent on poor learners. It is government's aim to increase this percentage to more than 100% for all provinces. There are many factors pushing this percentage up and down: the pro-poor post provisioning and school allocation policies of government; government's school building programmes (push the percentage up); problems in attracting teachers to rural areas (these factors push the percentage down).

Further specifications

Per learner education expenditure (in other words the total education expenditure divided by the number of enrolled learners) for quintile one (most poor) schools are divided by the per learner education expenditure of quintile five (least-poor) schools. In order to allow maximum inter-provincial comparability, expenditure and enrolment figures for public ordinary schools are considered.

It is important that the total cost of education be included in computing the expenditure per learner for quintile 1 and quintile 5 schools respectively. I.e. total personnel funding (on the basis of Persal educator and non-educator figures), total capex funding, and total non-personnel non-capital funding should be considered.

Background

Government has made a commitment to pro-poor funding practices, yet public expenditure on the poorest learners is still lower than public expenditure on the least poor learners This is a trend that is common amongst developing countries. A variety of factors coalesce towards this outcome: Differing levels in the remuneration of teaching and support staff, are but one of these factors. Given that the least poor schools are also more likely to secure additional revenue in the form of school fees and fundraising, the necessity for equalisation in public expenditure is self evident.

Formula

$$Exp\%_{Q1/Q5} = \left(\frac{\sum_{Q1} CAPEX + NPNC + PERSONNEL}{N_{Q1}} \right) / \left(\frac{\sum_{Q5} CAPEX + NPNC + PERSONNEL}{N_{Q5}} \right)$$

Where:

$Exp\%_{Q1/Q5}$ is the public expenditure on the poorest learners as a percentage of public expenditure on the least poor learners in the Province.

$\sum_{Q1} CAPEX + NPNC + PERSONNEL$ is the total sum of education expenditure on quintile 1 schools in terms of Capital Expenditure, Non-Personnel Non-Capital Expenditure, and Personnel Costs.

N_{Q1} Is the total number of learners enrolled in public ordinary schools that fall in quintile 1.

$\sum_{Q5} CAPEX + NPNC + PERSONNEL$ is the total sum of education expenditure on quintile 5 schools in terms of Capital Expenditure, Non-Personnel Non-Capital Expenditure, and Personnel Costs.

N_{Q5} Is the total number of learners enrolled in public ordinary schools that fall in quintile 5.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

Currently, complete expenditure figures per quintile are not available to the DOE and therefore an example is not completed. PEDs would, however, be in a position to obtain the relevant data from EMIS and their financial departments respectively.

Data Source

Enrolment figures for learners in public ordinary schools in quintile 1 or quintile 5 schools should be obtained from EMIS enrolment figures as computed from the Annual School Survey or the Snap Survey.

Personnel expenditure figures should be obtainable from PERSAL, whilst NPNC expenditure should also be relatively easy to obtain if PEDs have ensured that all schools are converted to cost centres. CAPEX expenditure on quintile 1 and quintile 5 schools might be somewhat more challenging to extract from the various provincial financial sources, but should exist in a form that would be possible to extracts.

Interpretation

Despite government's pro-poor funding policies, various factors result in this PM still being below 100% for all provinces. What we would be interested in, is a steady increase in the values, and eventually a fully pro-poor spending approach reflected in a PM value exceeding 100%.

►PM004: Years input per FETC graduate

Definition and purpose

This is the number of years of schooling government invests to produce each Grade 12 or equivalent graduate. Because learners repeat, and because learners drop out of the schooling system before the end of Grade 12, the number of years is always greater than 12. However, by keeping the number of years as low as possible, government can provide more education of a better quality to more people.

►PM005: Average highest school grade attained by adults in the population

Definition and purpose

The maximum value possible for this performance measure is 12. This would be the case if all adults in the population had completed Grade 12 or its equivalent. As our society becomes more educated, the value for this performance measure should increase. We should expect fairly gradual increases, as it takes many years for schooling and ABET to change the overall levels of education across the whole adult population.

Further specifications

For the purposes of calculating this PM, an adult is any person aged 19 years and older. Ideally, there would be no repetition and there would be full participation to the end of Grade 12. In such a situation, we would expect each learner to complete Grade 12 in the year he/she turned 18. For this reason, the age 19 lower limit was chosen in defining adult.

It should be noted that higher education attainment, which is not a provincial competency, is not covered by this PM. An adult with a higher education degree would thus carry a value of 12 only for the purposes of this calculation.

The following values are attributed to the different qualification categories on the GHS

0 = no schooling
0 = grade r/0
1 = sub a/grade 1
2 = sub b/grade 2
3 = grade 3/standard 1
4 = grade 4/standard 2
5 = grade 5/standard 3
6 = grade 6/standard 4
7 = grade 7/standard 5
8 = grade 8/standard 6/form 1
9 = grade 9/standard 7/form 2
10 = grade 10/standard 8/form 3
11 = grade 11/standard 9/form 4
12 = grade 12/standard 10/form 5/matric
10 = ntc I
11 = ntc II
12 = ntc III
11 = diploma/certificate with less than grade 12/std 10
12 = diploma/certificate with grade 12/std 10
12 = degree
12 = postgraduate degree or diploma
MISSING = other (specify in column)
MISSING = don't know
MISSING =unspecified

Since it is expected that some 18 years olds might still be busy with grade 12 if they had no repetitions, it is not applicable to use any age below 19 since it will introduce an unfair negative bias. Since it is expected that a number of repeaters could still be in school up to and even after age 20 the impact of repeater rates is considered in this PM. In other words, if the average highest school grade increases or if the repeater rates are brought down, the performance on this indicator would increase.

Background

The average highest school grade ranges between 7 and 10 for different provinces in the country.

There is considerable political and media attention given to indicators that report the average highest *qualification* of the population on an annual basis. It should be kept in mind that this PM is somewhat different from other calculations of this kind since it does not award values any higher than 12 for completion of tertiary education – something that is commonly done in the media. Allowing values higher than 12 to be included in calculations of the average highest qualification is an accurate approach for purposes of general consumption, but is should not be compared to this PM. This PM aims to give an undistorted picture of *school level* attainment and therefore seeks to exclude any situation where tertiary level attainment (carrying values such as 13, 14 and 15) of a small percentage in the population can average out poor school level figures. This PM is therefore likely to yield a more conservative value than the ones commonly used in the media that report the average highest qualification.

A second issue that should be considered is that it is not entirely clear which option a respondent will choose if he / she is busy with an NTCIII qualification after completing both NTCII and Grade 12 in previous years. Although the accurate reflection of highest grade should actually be Grade 12 with a corresponding value of 12, it is possible that this person would select NTCII based on the fact that it might have been attained more recently and therefore attract a value of 11. This has the potential to skew the results somewhat negatively but it is likely that the extent of this occurrence is limited in the GHS.

Formula

$$SAVG = \frac{T}{N}$$

Where

SAVG = The average highest school grade attained by all adults in the population.

T = The total computed by adding the highest grade values together of all people 19 years and older.

N = The number of people aged 19 years and older for which information on highest grade attained was available in the GHS

The preferred data format is a number ranging between 0 and 12 with 1 decimal.

Example

For Eastern Cape the $SAVG$ is calculated as follow:

T = 25,452,246 N = 3,439,290

$$SAVG = \frac{25{,}452{,}246}{3{,}439{,}290}$$

$$SAVG = 7.4$$

Data source

For non-census years, the data for the numerator and the denominator should be based on sample data derived from Stats SA household surveys.

Interpretation

The focus of this PM is to indicate, on average, how successful the adult population was in completing school level training whilst taking into account the negative effect of repeater rates. Possible values range between 0 (which indicates that the adult population is not educated at all) and 12 (which indicates that the adult population have qualifications of Grade 12 or higher). The policy target should be to move towards a result of 12 which would indicate that all adults have completed at least Grade 12 or its equivalent.

It should be emphasised that the data is sample data, so it would have a margin of error associated with it. The sampling error should be taken into account when comparing results of different provinces or different years.

Overlap with other indicators

None of the UNESCO indicators overlap directly with this PM. It bears some resemblance to the UNESCO indicator: "Educational attainment of the population aged 25 years and above" which is defined as the:

> Percentage distribution of population aged 25 years and above according to the highest level of education attained or completed with reference to the International Standard Classification of Education (ISCED)[1].

This UNESCO indicator and PM005 cannot be compared since the UNESCO indicator is interested in the qualifications of persons older than 25 whereas PM005 defines any person older than 19 as an adult. Additionally, the qualification levels are not quite congruent – PM005 relies on 12 rating categories whilst ISCED has 6 levels. Another difference is also that PM005 aims to produce an average level of educational attainment whilst the UNESCO indicator is interested in the percentage of people that attained qualifications at each level.

►PM006: Adult literacy rate

Definition and purpose

This is the percentage of adults who are able to read and write, at least at a basic level. Our Constitution guarantees the right to a basic education for all adults who were deprived of this in the past. For human rights reasons, but also for economic development reasons, this is an important performance measure for government. Our aim should be a 100% adult literacy rate.

Further specifications

For this specification we will deviate from the previous practice of regarding the completion of Grade 6 as the equivalent of having basic reading and writing skills.

1

Instead, self report data about whether individuals regard themselves as being able to read and write in at least one language will be used.

For this PM anyone 16 and older will be considered an adult because it is expected that a person should be able to read after the completion of General Education and Training (roughly at age 15).

Background

The definition of adult literacy is a highly debated one with as many different interpretations of it as the number of different role players that deal with it. Project literacy, the largest NGO working in the field of literacy distinguish between **functional literacy** and **sustainable literacy**. Functional literacy is generally regarded as Grade 9 or the NQF level 1 equivalent but it is accepted that this figure grossly underreports literacy figures. Sustainable literacy, i.e. literacy that will allow an individual to get by on a day to day basis, is regarded as being achieved when a person completes Grade 5.

The Adult literacy figures that Project Literacy reports on come from the Stats SA reported figures. Although the Stats SA census and census reports do not refer to adult literacy at all, it is one of the contributing variables in the construction of the Human Development Index (HDI) which is reported for UNESCO purposes. According to the specifications in the HDI report adult literacy rate is described as follows:

> "Adult literacy rate for the 1980 and 1991 HDI is defined as persons who are 15 years and older who can read, write and speak. Adult literacy rate as recommended by the United Nations (UN) in 1999 is the percentage of people aged 15 and above who can, with understanding, both read and write a short simple statement on their everyday life. Adult literacy rate for the 1996 HDI is defined as the cohort of all persons with grade 7 and higher calculated as a percentage of all persons 15 years and older".

An alternative way of establishing literacy rates comes from the General Household Survey Data that specifically asks all surveyed individuals if they are a) able to write in any language and b) able to read in any language. It is important to note that this is self report data and there is no guarantee that persons who say they can read and write can actually do so as measured by an objective standard.

An analysis of how the previous measure of literacy (Grade 6 at minimum) compares to the self report data is presented below.

The following table indicates how many people that have grade 6 at minimum say they can read / can't read. Figures relate to the GHS results 2003 for the whole of South Africa. Notice that approximately 7.9 million people are misclassified as illiterate if "Grade 6" is used as the indicator of literacy. On the other extreme, however, almost 112,000 people that have grade 6 say they can't read.

		Can Read	Can't Read	Total
Have Grade 6 at minimum	NO	**7,871,770**	11,257,441	19,129,211
	YES	26,969,325	**111,982**	27,081,307
Total		34,841,095	11,369,423	46,210,518

The following table indicates how many people that have grade 6 at minimum say they can write / can't write. Notice that approximately 7.8 million people are misclassified as illiterate if "Grade 6" is used as the indicator of literacy. On the other extreme, however, almost 135,000 people that have grade 6 say they can't write.

		Can Write	Can't Write	Total
Have Grade 6 at minimum	NO	**7,848,079**	11,281,397	19,129,476
	YES	26,946,569	**134,738**	27,081,307
Total		34,794,648	11,416,135	46,210,783

Clearly there is a discrepancy between individuals' ability to read and write. According to the definition of this PM only individuals that report that they are able to both read and write will be regarded as literate.

	Can Write	Can't Write	Total
Can Read	**35,013,838**	84,404	35,098,242
Can't Read	37,233	11,355,643	11,392,876
Total	35,051,071	11,440,047	46,491,118

Based on the figures in the above table, the national literacy rate for persons of all ages can be estimated to be approximately 75%.

Formula

$$LIT = \frac{T_{RW}}{P} * 100$$

Where

LIT is the Adult Literacy Rate

T_{RW} is the total number of persons aged 16 and older who report that they can both read and write as per the GHS data for the relevant year.

P is the total number of persons aged 16 and older as per the most recent GHS data

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

For Eastern Cape the LIT is calculated as follow:

$$T_{RW} = 3{,}392{,}250 \qquad P = 3{,}966{,}159$$

$$LIT = \frac{3{,}392{,}250}{3{,}966{,}159} * 100$$

$$LIT = 85.5\%$$

Data source

For non-census years, the data is based on sample data derived from Stats SA household surveys or population estimates as provided by the DOE.

Interpretation

The literacy rates for different provinces range between 70% and 90%. Since it is the aim of the education department to increase adult literacy rates to 100%, the policy target is to achieve 100%.

Overlap with other indicators

This aligns somewhat with the UNESCO indicator "Adult Literacy or Illiteracy rates" which is defined as:

> The percentage of population aged 15 years and over who can both read and write with understanding a short simple statement on his/her everyday life.

According to UNESCO, the definition of an adult for the purposes of this indicator is anyone older than 15 years of age. This is slightly different from the definition used for an adult in indicator PM006 and therefore aligns somewhat on this dimension. On the other dimension, i.e. what is considered literate or not, PM006 differs from the UNESCO definition. PM006 uses self reported ability to read and write as the equivalent of having basic reading and writing skills. For the purpose of PED's analysis it is justified to use the definition of literacy as indicated above since no data on any other standardised measure is available that closely corresponds with UNESCOs expectations.

►PM101: Percentage of schools implementing the School Administration and Management System

Definition and purpose

The School Administration and Management System (SAMS) is a nationally designed and computerised system that allows schools to organise and use their learner, staff, facilities and finance information more effectively. SAMS will improve the planning capacity of schools and consequently better service could be expected from these schools.

Further specifications

SAMS comprises different modules and revisions which are implemented as the software develops further. For the purposes of this indicator it is not necessary to take into account the specific version or variety of modules available to the schools.

Background

The South African Schools Administration and Management System (SA-SAMS) is a software package that covers the school profile, learner and parent information, human resources, curriculum, governance, finances, learner support material (LSM), physical resource, security, stock and assets and time-tabling. It covers all the information needed by a school to complete the Annual Schools Survey. It provides real-time information at school level at any time. Specific learner information that may be aggregated includes learner attendance, movement, promotions, discipline and

mortality. The curriculum module records results from Continuous Assessment (CASS) and promotions. The RNCS revision and learner tracking components are in its conceptualisation phases and will be included in the 2006/7 version.

Formula

The following formula should be used to compute this PM.

$$SAMS = \frac{S}{N} * 100$$

Where:

$SAMS$ is the percentage of schools in the province that have SAMS

S is the number of schools in the province that have SAMS

N is the total number of public ordinary schools in the province

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

No data is currently available on SAMS implementation within the DOE

Data source

SA-SAMS records for the school year in question

Interpretation

Access to information technology has an impact on the uptake of SAMS. Each province should consider current performance against past performance and set targets for the future based on realistic expectations.

►PM102: Percentage of schools that can be contacted electronically by the department

Definition and purpose

E-mail assists schools in contacting the Department quickly when there is a problem the Department needs to deal with. This form of communication also allows the Department to swiftly and at a low cost to communicate information about policy changes, ongoing projects and general circulars. It is government's aim to ensure that all schools enjoy e-connectivity.

Further specifications

It is important to ensure that schools have access to computer equipment connected to the internet and have a working e-mail account. E-mail can, however, only be successfully utilised for administrative purposes if the school has a relatively reliable internet line and someone with the skills to use e-mail on behalf of schools.

Background

Most PEDs have initiatives underway in partnership with donors to ensure that schools gain access to internet connectivity - Both in terms of equipment and skills. It has the potential to become a quick and effective mechanism for communication that could supplement current channels of communication between schools and the PEDs. With the high cost of telecommunications and the relatively low uptake of broadband technology amongst South Africans in general it is likely to take some time for a critical mass of schools to be empowered to effectively use electronic means of communication.

Formula

$$EComm = \frac{E}{N} * 100$$

Where:

$EComm$ is the percentage of schools in the province that can be contacted electronically by the department. This information is available from the Administration section of the Annual Survey of Schools which asks schools to indicate whether they use email for administrative purposes.

E is the number of schools in the province that have and email address

N is the total number of public ordinary schools in the province

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

This data is captured on the ASS, but no example data from the 2003 ASS was available at the time of completing this specification.

Data source

The Annual School Survey provides information about the number of schools that use e-mail for administrative purposes. In the 2003 ASS this was under question 6.10 in the Administration section.

Interpretation

The target for this indicator should be as close to 100% as possible, although various factors outside of the PEDs control may impact this (e.g. schools may have the equipment and ability to use electronic means of communication but still prefer to do business over the telephone or fax). A low level of uptake should be expected in provinces with more rural schools since the access to fixed line telecommunications is generally a prerequisite for this indicator.

►PM103: Percentage of black women in management positions

Definition and purpose

This is the percentage of black women in management positions. Although employment equity covers a number of areas, black women in management positions are very important in highlighting progress towards employment equity in Provincial Education Departments.

Further specifications

According to the Employment Equity Act of 1998 and the White Paper on Affirmative Action in the Public Service "Black people" is a generic term that means Africans, Coloureds and Indians. The demographic profile of all Provincial Education Departments will differ according to race.

Since this indicator focuses on administration programme 1, "management position" refers to rank of Directors and equivalent positions as well as higher-ranking positions. School principals are excluded from this PM.

Background

In accordance with the Employment Equity Act of 1998 (Act No. 55 of 1998), all government departments must strive to have a workforce that is representative of the general population in terms of race, gender and disability. Each Provincial Department of Education differs in terms of the preparation, implementation and monitoring of employment equity according to an Employment Equity Plan. The Employment Equity act does make mentions that every employer must implement an affirmative action measure for people of designated groups. The definition of "designated groups" according to the Employment Equity Act refers to black people, women and people with disabilities. The Education departments employ Managers, and it is imperative that there should be representation of black women.

The White Paper on Affirmative Action in the Public Service (Notice 564 of 1998) does point out that the majority of women have been employed in lower level positions and very few in decision making positions.

Originally the intention was to create a composite indicator of compliance with departmental Employment Equity targets. This was found to be difficult because provinces have different targets with regards to race, gender and disability and no single numerical value adequately captured the progress towards these targets. Instead it was decided to develop an indicator that captures at least two dimensions of the employment equity aims. Tracking the representativity of senior management and specifically the degree to which black women are included amongst senior managers captures progress towards equity in terms of race as well as gender.

Formula

$$BWMP = \frac{BWM}{M} * 100$$

where

$BWMP$ is the percentage of black women in management positions

BWM are the number of black women in management positions

M is total number of people in management positions

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

For Eastern Cape BWMP is computed as follow:

BWM for Eastern Cape is 12 M for Eastern Cape is 67

$$BWMP = \frac{12}{67} * 100 = 17.9\%$$

Data source

PERSAL

Interpretation

According to Stats SA's mid-year population estimates for 2004 women make up approximately 52% of South Africa's population and black women make up approximately 48% of South Africa's population. Yet the percentage of black women in senior management positions fall far short of 48%. This is particularly concerning if one considers that black women have traditionally had greater access to education as a career option and yet they are still significantly underrepresented in the senior ranks. The target for this PM should be to have (at minimum) the same representation of black women amongst senior managers as is found in the general population for that province.

►PM104: Percentage of current expenditure going towards non-personnel items

Definition and purpose

This is the percentage of education expenditure, other than expenditure on physical infrastructure (Non Personnel Non Capital), going towards non-personnel items such as textbooks, stationery and scholar transport.

Further specifications

For the purposes of this analysis capital expenditure is excluded. According to Treasury's Standard Chart of Accounts (SCOA) the total annual Current Expenditure is comprised of Current Payments and Compensation of Employees. Current Payments is regarded as a non-personnel item. For the numerator, all amounts indicated under current expenditure other than compensation of employees are used. For the denominator all amounts for current expenditure is used.

Background

There is no easy answer for what this percentage should be. Policy provides a general guideline of 15% to 20% (this includes expenditure on infrastructure, however). The figure should nevertheless not be too low, or educators will have

difficulties delivering the education service properly, as they will not have the tools they require.

Formula

$$NonPE = \frac{Curr - PE}{Curr} * 100$$

Where:

$NonPE$ is the Percentage of current expenditure going towards non-personnel items

$Curr$ is Current Payments for a financial year

PE is the compensation of employees (including salaries and other contributions for educators and non-educators)

The preferred data format is a percentage with one decimal

Example

From the Eastern Cape budget statement of 2005 the following figures were available for the 2003 / 04 financial year.

$Curr$ = 10,040,728 PE = 8,701,874

(Note that the above is in R1,000's)

And therefore the following result is obtained:

$$NonPE = \frac{10{,}040{,}728 - 8{,}701{,}874}{10{,}040{,}728} * 100$$

$$NonPE = \frac{1{,}338{,}844}{10{,}040{,}718} * 100 = 13.3\%$$

Data source

Provincial budget statement and annual reports

Interpretation

Values in the range of 10% - 20% are expected. Values below this indicate that staff probably do not have the requisite tools available to do their work. It is best to contextualise this value with view of similar expenditure figures in the past and specific policy programmes that would change future targeting of resources.

Overlap with other indicators

This seems to correspond somewhat with the UNESCO indicator "Teachers' emoluments as percentage of public current expenditure on education". The UNESCO indicator aims to measure:

Public expenditure devoted to teachers' emoluments expressed as a percentage of total public current expenditure on education. This indicator measures the share of teachers' emoluments within public current expenditure on education, in relation to spending on administration, teaching materials, scholarships, etc.

►PM201: Percentage of learner days covered by the nutrition programme

Definition and purpose

This is the number of lunches provided at schools, through government's nutrition programme, divided by all the learner days in a year (a learner day is one learner's attendance on one day). This percentage goes up when more learners are covered by the nutrition programme, or when each learner receives more lunches in one year. The maximum possible is 100%. We would expect the percentage to be higher in those provinces with the greatest poverty levels.

Further specifications

The term "lunches" are used broadly to refer to the number of meals provided to learners. Typically, one meal is provided to learners during break time on every school day and may include a variety of menu items such as sandwiches, porridge, soup etc. The DOE has guidelines in place to ensure that the food provided through the NSNP has high nutritional value and therefore it is assumed that the food provides adequate nutritional value. Nutrional value does however fluctuate due to the availability of produce from school gardens, interruptions in the supply chain etc. There is no guarantee that the meals provided through the National School Nutrition Programme (NSNP) reaches the poorest of the poor learners and is taken up to the desired degree by the learners. This indicator intends to report on school feeding under the NSNP and should exclude all other lunches provided by other donor driven initiatives. Grade R learners are included in this calculation.

If the data is sourced from the ASS, the following should be kept in mind. Although EMIS intends for all public ordinary schools to complete fully an annual school survey, this is not always the case. Some schools may have completed the ASS, but may omit the specific question pertaining to the NSP. The figures as per the ASS should be used for this calculation, since it is impossible to know whether schools that did not submit data did so because none of the learners receive nutritional support or whether they omitted the question.

Background

The link between lack of nutrition and attention deficits in the classroom is well documented in international literature. Lack of nutrition is recognised as a significant barrier to learning. In view of governments' commitment to poverty alleviation, the National School Nutrition Support Project targets poor schools situated in the most disadvantaged areas of the country. The programme feeds selected learners each day, including all the children attending primary schools in the 13 rural and eight urban poverty nodes. The DoE has taken care to ensure that the menus for the NSNP are well balanced, especially where manufactured products are used, and the quality of the latter is approved by the Department of Health. Partnerships were established with the Woolworth's Trust, SABC Education, as well as with other government departments, in order to ensure sustained food security.

Formula

$$NDays = \frac{\sum(LSD)}{L_T * D_T} * 100$$

Where

$NDays$ is the percentage of learners days covered by the NSNP

LSD is the number of learner days for which nutritional support is provided at each school. This includes all Grade R to Grade 9 learners that receive Nutritional Support in a specific school in the province. If 200 learners benefit for 100 days, then the LSD for that specific school is 2000. All the LSDs from all the different schools are added together.

The number of days for which nutrition support is provided in a specific school is currently not available on the ASS and any other reliable Provincial data source could be used. The average number of school days for which NSNP support is provided is usually available and may be used for this calculation. If this data is not available assume that it the same as the total number of school days in the school year (201 or 202 depending on the Province for the year 2005)

L_T is the total number of learners in public ordinary schools in the Province

D_T is the total number of possible school days in a province. This is determined on an annual basis by the Department of Education.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

Note, that data on the number of school days for which NSNP support was provided is not available. In the following example and attempt is made to estimate this using the total possible number of school days for which support is provided.

For Northern Cape, NDays are calculated with the following values:

$$LSD = 108{,}997 * 202 = 22{,}017{,}394 \qquad L_T = 199{,}229 \qquad D_T = 202$$

$$NDays = \frac{22{,}017{,}394}{199{,}229 * 202} * 100 = 54.7\%$$

Data source

The annual school survey has a question on the number of learners that receive support under the NSNP. It currently does not collect information on the number of days that this support is provided at each school but other Provincial Data sources could be used for this.

School nutrition statistics are specified in the statistical tables and indicate both the number of learners that benefit from the programme as well as the average number of school days that this nutritional support covers. Ideally the actual number of school days for which support is provided at each school should be used. If this is not available then the average number of school days for which support was planned (as per DORA) should be used instead.

Interpretation

This PM should be interpreted with care since it considers the level of poverty in the province and the education department's response to this. If this percentage is low, it could either mean less NSNP support is required because fewer learners in the province are poor relative to other provinces, or that the province has not yet responded adequately (in terms of the number of children it reaches or the number of learner days that the project covers) to this problem. Therefore it is recommended that this PM is interpreted together with information on Provincial poverty figures e.g. National quintiles 1 and 2. If 50% of the population in a province is said to be poor and only 40% of learner days are covered, it means that the PED's response to poverty alleviation should be geared up.

The user should be cautioned not to use this indicator as a proxy for poverty levels as is typically done in international literature. The number of learners that receive "free lunches" are often used to determine how many learners are poor, but since this PM also takes into account the provincial response to the challenge, it is not appropriate.

This percentage goes up when more learners are covered by the nutrition programme, or when each learner receives more lunches in one year. The maximum possible is 100%. We would expect the percentage to be higher in those provinces with the greatest poverty levels.

►PM202: Percentage of learners in public ordinary schools with special needs

Definition and purpose

This is the percentage of learners in public ordinary schools with special needs. Historically, such learners have had problems accessing public ordinary schools though, in view of government's inclusive education policy, measures should be taken to make access a reality for special needs learners.

Further specifications

The EMIS Annual Survey of Schools includes questions dealing specifically with this issue. Schools are asked to indicate the number of learners with a variety of Special Education Needs. The Special Education Needs listed on the EMIS questionnaire includes: Attention Deficit Disorder, Autistic Spectrum Disorder, Behavioural Disorder, Blind, Cerebral Palsied, Deaf, Deaf/blind disabled, Epilepsy, Hard of Hearing, Mild or moderate intellectually disabled, Multiple Disabled, Partially Sighted, Physically Disabled, Severe Intellectually Disabled, Specific Learning Disabled.

These learners could be in mainstream classes or in special classes within mainstream schools.

The denominator for this calculation is the total number of learners in public ordinary schools in the province. In the ASS a school that has LSEN learners but do not report this and those schools that do not have LSEN learners would both yield a null value.

Background

In October 1996, the Ministry of Education appointed the National Commission on Special Needs in Education and Training and the National Committee on Education Support Services to investigate the provision of education to learners with Special Education Needs. The bodies confirmed that learners with disability experienced great difficulty in gaining access to education. Very few special schools existed and they were limited to admitting learners according to rigidly applied categories. Learners who experienced learning difficulties because of severe poverty did not qualify for educational support. The categorisation system allowed only those learners with organic, medical disabilities access to support programmes. The impact of this policy was that only 20% of learners with disabilities were accommodated in special schools. The World Health Organisation has calculated that between 2.2 % and 2.6 % of learners in any school system could be identified as disabled or impaired. White Paper 6 estimated that an application of these percentages to the South African school population would project an upper limit of about 400,000 disabled or impaired learners. Statistics at the time showed that only about 64,200 learners with disabilities or impairments were accommodated in about 380 special schools. This indicates that, potentially, 280,000 learners with disabilities or impairments were unaccounted for. This PM aims to partially account for those LSEN that were previously "missing" or "invisible" in the education system in addition to those learners who were excluded from any education.

The education and training system intends to promote education for all and foster the development of inclusive and supportive centres of learning that would enable all learners to participate actively in the education process so that they could develop and extend their potential and participate as equal members of society. Mainstream schools have a special role to play within this approach. White paper 6 on Inclusive Education further elaborates on government's strategies to address inclusion of LSEN.

Although EMIS intends for all public ordinary schools to complete an annual school survey, this is not always the case. Some schools may complete the ASS, but omit the specific question pertaining to LSEN learners.

Formula

$$LSEN = \frac{M + S}{P_{All}} \text{ x } 100$$

where

$LSEN$ is the percentage of learners in public ordinary schools with special education needs.

M is the number of learners with special education needs in grade 1 to grade 12 mainstream classes in public ordinary schools (From the grand totals of Question 2.9a Question 2.9b on the 2003 ASS)

S is the number of learners with special education needs in grade 1 to grade 12 special classes in public ordinary schools (From the grand totals of Question 2.6.2a total, Question 2.6.2b total)

P_{All} is the total number of grade 1 to grade 12 learners in public ordinary schools as per the PEDs enrolment data.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

Based on 2003 ASS data for the Eastern Cape:

M = 7,021 (in the 490 schools that submitted this information)

S = 17,031 (in the 490 schools that submitted this information)

P_{All} = 2,100,024 (in the 6100 schools in the province)

And therefore

$$LSEN = \frac{7{,}021 + 17{,}031}{2{,}100{,}024} \text{ x } 100$$

$$LSEN = \frac{24{,}043}{2{,}100{,}024} \text{ X } 100$$

$$LSEN = 1.1\% \text{ *}$$

*Note that only 8% (490 out of 6100) of schools submitted data for the denominator in the calculation of this PM and therefore results should be interpreted with care

Data Source

EMIS Annual Survey of Schools data applicable to the year in question.

Interpretation

This PM intends to track government's performance towards including LSEN in mainstream education and to gain insight into the level of adaptation that is required within public ordinary schools to accommodate LSEN. If a very low percentage of LSEN relative to the disabled population in the province are in public ordinary schools, then it indicates that more work should be done to ensure that LSEN access schooling, especially if the number of special schools in the province is limited. Low percentages of LSEN learners could also be due to the fact that many schools are not sufficiently sensitised to identify and deal with LSEN learners and therefore do not report LSEN learners on the Annual School Survey. If a very high percentage of LSEN relative to the total school population are included, this will have an impact on resource planning for these schools.

►PM203: Percentage of public ordinary schools with a water supply

Definition and purpose

This is the percentage of public ordinary schools that have access to some kind of supply of clean water. For health and other reasons it is important that all schools should have access on the premises to clean water.

Further specifications

For the purposes of this PM schools with piped water, delivered water or "Other" (which probably includes borehole water) is considered as having water on site. Schools that report that no water is available or that water is available within walking distance or that water is available from a communal tap are considered not having access to water. The principle is in other words that a school must have some water supply *on* the premises of the school to be counted for the purposes of this PM. Since it is also not possible to know whether a communal tap is on the school premises or not, it is excluded in order to get a slightly more conservative view of the scope of the challenge. Figures are reported for all public ordinary schools since these schools complete the ASS annually.

Although EMIS intends for all public ordinary schools to complete fully an annual school survey, this is not always the case. Some schools may have completed the ASS, but may omit the specific question pertaining to water on site. Although the figures as per the ASS should be used for this calculation, it is important to check the number of public ordinary schools for which ASS data is available against the actual number of public ordinary schools in the Province, and also take into account the number of non-responses on this indicator. If significant deviations are found, this should be indicated in the analysis with a suggestion of whether the reported result is likely to be positively or negatively skewed. If more than 10% of the schools were excluded from this analysis, it is important to make a note of this when the results of this PM are reported. If more than 30% of the schools are missing, the PED should indicate that insufficient data was available for the calculation of this PED.

Background

Government has made a commitment to make water available to all schools, since the lack of water on site could have significant health and safety implications for learners. This PM indicates to what degree government has succeeded in this regard.

Formula

$$WATER = \frac{W}{N} * 100$$

where

$WATER$ is the % of public ordinary schools with piped, delivered, or "other" water supply

W is the total number of schools with piped, delivered or "other" (e.g. borehole) water supply on site. Schools that indicate they have no water, have water at a communal tap or water within walking distance is not regarded as having water on site.

N is the total number of schools for which water data was collected on the ASS

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

For Eastern Cape the $WATER$ is calculated as follow:

$$W = 2497 \qquad N = 5408$$

$$WATER = \frac{2497}{5408} * 100 = 46.2\% *$$

*Note that only 88.7% (5408 out of 6100) of schools submitted data for the calculation of this PM and therefore results should be interpreted with care

Data source

EMIS Annual Survey of Schools data applicable to the year in question. On the 2003 ASS this was included in question 15.14 under the Infrastructure section. Many initiatives are currently underway to improve the information systems available to assess infrastructural delivery at school level. If other more reliable data sources become available, PEDs should investigate these for applicability.

Interpretation

The policy target should be 100% for this PM. Values falling short of this target should be interpreted with regards to the urbanisation levels in the province. It is expected that provinces with more rural schools are likely to have greater challenges in terms of water delivery.

►PM204: Percentage of public ordinary schools with electricity

Definition and purpose

This is the percentage of public ordinary schools with an electricity supply. Electricity is an important prerequisite for the introduction of modern technologies that can enhance management, teaching and learning in schools.

Further specifications

For the purposes of this PM any form of electricity indicated on the ASS (e.g. Wired and supplied by ESKOM, Self-generated using generators, Solar panels) qualifies a school as having electricity. The principle is in other words that a school must have any electricity supply irrespective of whether this electricity source could be expected to be operational at all times – In the case of solar panels electricity supply might be interrupted on overcast days and in the case of wired electricity, cable theft might impact on the actual supply of electricity.

Although EMIS intends for all public ordinary schools to complete fully an annual school survey, this is not always the case. Some schools may have completed the

ASS, but may omit the specific question pertaining to electricity on site. Although the figures as per the ASS should be used for this calculation, it is important to check the number of public ordinary schools for which ASS data is available against the actual number of public ordinary schools in the Province, and also take into account the number of non-responses on this indicator. If significant deviations are found, this should be indicated in the analysis with a suggestion of whether the reported result is likely to be positively or negatively skewed. If more than 10% of the schools were excluded from this analysis, it is important to make a note of this when the results of this PM is reported. If more than 30% of the schools are missing, the PED should indicate that insufficient data was available for the calculation of this PED.

Background

Government has made a commitment to make electricity available to all schools since it impacts on the availability of teaching and learning support materials in the classroom. This PM indicates to what degree it has succeeded in this regard.

Formula

$$ELECTRICITY = \frac{E}{N} * 100$$

Where

$ELECTRICITY$ is the % of public ordinary schools with any form of electricity.

E is the total number of schools with any form of electricity.

N is the total number of schools for which electricity data was collected on the ASS

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

For Eastern Cape the $ELECTRICITY$ is calculated as follow:

$$E = 2842 \qquad N = 5423$$

$$ELECTRICITY = \frac{2842}{5423} * 100 = 52.4\% *$$

*Note that only 88.9% (5423 out of 6100) of schools submitted data for the calculation of this pm and therefore results should be interpreted with care

Data source

EMIS Annual Survey of Schools data applicable to the year in question. On the 2003 ASS this was included in question 15.13 under the Infrastructure section.

Interpretation

The policy target should be 100% for this PM. Values falling short of this target should be interpreted with regards to the urbanisation levels in the province. It is expected that provinces with more rural schools are likely to have greater challenges in terms of electricity supply.

►PM205: Percentage of schools with an adequate number of functional toilets

Definition and purpose

This is the number of schools with at least 1.5 functional toilets for each classroom or 1 toilet per 20 learners as per the building standards. For health and school attendance reasons, it is important for the schooling system to move towards this minimum norm for all schools.

►PM206: Expenditure on maintenance as a percentage of the value of school infrastructure

Definition and purpose

This indicator provides an indication of what percentage of the budget is spent on maintenance of existing buildings and equipment. It is important that existing buildings and equipment in the schooling system be maintained properly, so that they are fully functional, and replacement can be minimised. Policy stipulates that annual expenditure on maintenance of facilities should amount to at least 1.5% of the total value of those facilities.

Further specifications

According to national benchmarks the annual expenditure on maintenance should be 1.5% - 2% of the replacement value of the capital stock. This would allow for school buildings to be used for at least 50 years and still be as fit for purpose as a new school. Maintenance figures for schools should be extracted from PEDs financial records as per the Standard Chart of Accounts under the item: “Maintenance, Repair and Running Cost (1056888)”. The value of the capital stock of all schools in the province should be taken as per the relevant asset register (administered either by the PED or the relevant Department of Public Works).

Background

The benchmark for spending on maintenance comes from the SANSO norms applied by the Department of Public works. The SANSO norms were developed for education buildings and were mainly used by universities and government buildings. These norms specify that a government building (such as a school) should have a useful lifetime of approximately fifty years and should still be fit for purpose in the 51st year. Based on this assumption, the maintenance cost should be 1/50th of the replacement value of the building, which equates to 2% per annum). These norms were verified by a building audit conducted in the Western Cape in 1999. In this audit quantity surveyors’ average estimates of maintenance for school buildings came to around 1.8%. Current spending on maintenance is around 1% per annum which means effectively that the useful lifetime of buildings are being shortened to 20 -25 years.

Formula

$$M\% = \frac{MExp}{CValue}$$

Where

$M\%$ is the expenditure on maintenance as a percentage of the value of school infrastructure

$MExp$ is the expenditure on maintenance per annum in rands

$CValue$ is the value of the capital assets (schools) as per the relevant asset register(s).

Example

No values are currently available for the calculation of this PM.

Data source

Maintenance expenditure figures should be held by PEDs financial departments as per the SCOA grid and the capital asset value should be extracted from the relevant asset register(s) held by the PED or the Provincial Department of Public Works.

Interpretation

The target should be between 1.5% and 2%. If this PM is higher than 2%, too much money is being spent on maintenance that could have been spent on other education needs including the building of new schools. If this PM is lower than 1.5% it indicates that a maintenance shortfall exists and that the infrastructure will continuously decay into a state of disrepair.

►PM207: Percentage of schools with more than 40 learners per class

Definition and purpose

This is the percentage of schools with a learner/educator ratio greater than 40. Very large classes are clearly not good for teaching and learning, and the aim is to bring this percentage down to 0%.

Further Specifications

This PM is not concerned with the physical number of class rooms per school. It is concerned with the ratio between the average number of children per class group or per educator.

This PM is different from previous calculations of this kind in that it does not consider the learner to educator ratio at the provincial level (i.e. taking the total number of learners in the province and dividing it by the total number of educators in the province), but takes into account how many schools have an average learner to educator ratio exceeding 40:1. This is done to clearly demonstrate the level of intervention required at school level.

Although data is available on the ASS about the number of learners in each class group, this PM does not intend to report on the number of classes per school that exceed the 40:1 ratio, but it reports the number of schools where, when you divide the total number of learners in the school by the total number of teaching staff members (including the principal and teachers funded by non-departmental sources) a ratio of 40:1 is exceeded.

Background

Quality of education is a prominent goal of the Education Department. It has generally been accepted that a learner to educator ratio greater than 40:1 impedes quality of teaching and learning, amongst many other factors. Previous calculations of the learner to educator ratio were conducted at Provincial level (Taking the total number of learners in the province and dividing them by the total number of educators) and therefore masked the challenge that some schools experienced to some extent because it was averaged out by schools where the ratio is more favourable. This PM is better in indicating where the greatest challenge lies for the Department of Education.

This PM takes into account the actual number of teachers at a school rather than the number of posts provided to a school. Some schools have more teachers than the number of posts provided by the department because they are able to make SGB appointments using other sources of funding. In these situations a solution to a potential problem has been found within the framework provided by SASA and it does not necessarily require intervention from the PED to improve the quality of education.

Formula

$$LEP_{>40} = \frac{\sum LE_{>40}}{S} * 100$$

Where

$LEP_{>40}$ is the Percentage of Schools with a Learner to Educator ratio greater than 40:1

$LE_{>40}$ L is the number of schools where the learner to educator ratio is greater than 40:1. Only teaching staff are used for this calculation. All learners are used.

S is the number of schools in the province for which learner and educator numbers were available

In this calculation the number of schools where the ratio of learners to educators is greater than 40 is expressed as a percentage of the total number of schools.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

From the 2003 ASS, the following values apply to the Eastern Cape:

$LE_{>40}$ = 1036 S = 5938

$$LEP_{>40} = \frac{1036}{5938} * 100 = 17.4\%$$

Data source

Both learner numbers and educator numbers can be extracted from the Annual School Survey.

Interpretation

The target should be 0% since PEDs would not want any schools with a learner to educator ratio of more than 40:1.

►PM208: Percentage of non-Section 21 schools with all LSMs and other required materials delivered by day one of the school year

Definition and purpose

This is the percentage of schools depending on the Department for the procurement of textbooks and other LSMs, which receive all the goods they expect by the first day of the school year, at the latest.

Further specifications

Although schools could have certain functions awarded to them, the particular function that is of interest in this PM is function c which allows schools the power to purchase their own text books and LSM. If schools do not have function c awarded to them, they are dependent on the Department of Education to select and purchase LSM for the school. In the past some schools complained that there are unnecessary delays in this process.

Background

According to section 21 of the South African Schools Act (SASA) schools could apply to take over responsibility for certain functions at the school level. These include: (a) To maintain and improve the school's property, and buildings and grounds occupied by the school, including school hostels, if applicable; (b) to determine the extra-mural curriculum of the school and the choice of subject options in terms of provincial curriculum policy; (c) to purchase textbooks, educational materials or equipment for the school; (d) to pay for services to the school; or (e) other functions consistent with this Act and any applicable provincial law.

Formula

$$O = \frac{R_{Non-Sec21}}{T_{Non-Sec21}} * 100$$

Where

O is the percentage of schools where textbooks and other LSM were delivered on time

$R_{Non-Sec21}$ is the number of non-section 21 schools that received their LSM on time.

$T_{Non-Sec21}$ is the total number of non-section 21 schools in the province i.e. schools that depend on the department to purchase textbooks of educational materials.

The preferred format is a percentage with at least one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

Although the ASS contains some information about the section 21 Status of the school, this data was not available at the time of completing this specification. Information on the prompt delivery of LSM is available to the procurement departments in each PED.

Data source

Any reliable provincial data source on text book delivery for non-section 21 schools and the most recent ASS.

Interpretation

The target for this indicator is 100%. If schools do not receive all their LSM by the time the school year starts, unnecessary disruptions in teaching and learning is caused. This is of great concern to the department of education and will require prudent action by the relevant PED to identify the reason for late delivery and the eradication of such delays in future.

►PM209: Percentage of schools with Section 21 status

Definition and purpose

This is the percentage of schools granted certain management responsibilities, including financial management responsibilities, in terms of section 21 of the South African Schools Act. (This has nothing to do with Section 21 companies.) It is important for more schools to be made ready for this self-management status so that schools can respond more effectively to local pressures.

Further specifications

For the purposes of this PM schools that indicate they have Section 21 status on the ASS, are counted.

Background

According to section 21 of the South African Schools Act (SASA) schools could apply to take over responsibility for certain functions at the school level. These include: (a) To maintain and improve the school's property, and buildings and grounds occupied by the school, including school hostels, if applicable; (b) to determine the extra-mural curriculum of the school and the choice of subject options in terms of provincial curriculum policy; (c) to purchase textbooks, educational materials or equipment for

the school; (d) to pay for services to the school; or (e) other functions consistent with this Act and any applicable provincial law.

Formula

$$S_{Sec21} = \frac{S}{T} * 100$$

Where

S_{Sec21} is the percentage of schools with Section 21 Status.

S is the number of schools with Section 21 Status as per the Annual School survey.

T is the total number of schools in the province that submitted data on this question.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

Although this information is captured in the ASS, no data was available at the time of completing this specification.

Data source

The Annual School Survey could be used for this PM. In the 2003 ASS the status of the school was captured in question 13.1 under the finance section.

Interpretation

Since it would be the ideal to have all schools able to manage their own affairs, the target for this PM should be 100%. If a PED's performance falls short of this target it indicates that support at school level would be required to capacitate schools to manage their own affairs.

►PM210: Percentage of working days lost due to educator absenteeism in public ordinary schools

Definition and purpose

This is the number of educator working days that have been lost expressed as a percentage of the total number of available educator working days. This performance measure takes into account any absence of educators from schools, for any reason, where there was no replacement educator. For schools to function properly, it is important that learners should not be without their educators. The aim should be to keep the result of this performance measure as low as possible.

Further specifications

Absenteeism of both fulltime and part time educators (including the principal if she/he is required to teach) should be taken into account, but absenteeism of non-teaching support staff should be excluded. In order to determine whether an educator was absent or not, (e.g. if he /she was only absent for a part of a day) principals are

required to refer to the relevant leave policy and the ELRC guidelines. The "total number of working days" is computed by multiplying the number of staff by the total number of working days as determined annually by the Education Department. The "working days lost" is computed by adding together the number of working days that each educator was absent *without a replacement* irrespective of the reason for non attendance (e.g. family responsibility leave, sick leave etc.).

Background

The number of working days lost impacts on the quality of education and therefore an attempt should be made to minimise this. Unforeseen educator absenteeism is often a symptom of systemic challenges in the environment and as such should receive particular attention from the PEDs. If the number of working days lost due to e.g. stress leave or the impact of HIV/AIDS in a specific school is excessive, it might be necessary to implement initiatives together with the school management to address this. Educator absenteeism is often caused by departmental training, industrial action, illness and family responsibility leave.

Formula

$$P_{LWD} = \frac{\sum LWD}{\sum TWD} * 100$$

Where

P_{LWD} is the percentage of lost working days in the province

$\sum LWD$ is the sum of the number of lost working days at all schools in the province. The LWD per school is computed by adding the number of days that each (fulltime or part time) educator was absent without a replacement.

$\sum TWD$ is the sum of the number of working days at all schools in the province. The TWD per school is computed by multiplying the number of fulltime educators by the number of working days for educators as determined by the DOE. The working days of part time teachers should also be included in this calculation.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

No example data is currently available at the DOE to compute an example. However, based on the target set by KZN for 2005 in their annual performance plan, the following illustrative example is provided:

$\sum LWD$ is 910,153

$\sum TWD$ is 73,637 x 206 = 15,169,222

Note that no information was available on the number of educators that are fulltime and part time and the expected number of total working days. For this example it was assumed that all 73,637 educators were employed for a full year in a fulltime position and would therefore be expected to work the 206 working days

$$P_{LWD} = \frac{910{,}153}{115{,}169{,}222} * 100 = 6.0\%$$

In order to demonstrate how the P_{LWD} for the province is computed, it might be useful to consider how the P_{LWD} at a single school would be computed. Consider the following fictitious example:

LWD = 20	9 fulltime educators absent for 2 days each, 2 part time educators absent for 1 day each without replacement. Therefore (9 x 2) + (2 x 1)
TWD =	28 Fulltime educators expected to work 206 days = 28 x 206 = 5,768
5,988	2 Part time educators expected to work 110 days = 2 x 110 = 220
$P_{LWD} = 0.3\%$	P_{LWD} = $\frac{20}{5{,}988} * 100$

Note that in order to compute the provincial values, the LWD for all schools in the province must be added together and divided by the sum of TWD for all schools in the province.

Data source

This PM can currently not be computed by provinces since accurate data sources are not available. It is envisaged that this information will be obtained by EMIS through the Annual School Survey in future. School Principals should have systems in place at school level which will allow the quick compilation of this figure on an annual basis.

Existing information sources on educator absenteeism (i.e. PERSAL) are not appropriate since there are huge backlogs in the capturing of leave information which are unlikely to be eliminated in the short term. In addition, PERSAL does not provide information on how many educators were absent *without a replacement teacher at the school.*

Interpretation

The higher the percentage of lost working days, the greater the negative impact on the quality of education provided and the greater the need for the province to find effective measures of intervention for this. Provinces should aim to obtain a score as close to 0% as possible.

►PM211: Percentage of learner days lost due to learner absenteeism in public ordinary schools

Definition and purpose

This is the number of learner days that have been lost expressed as a percentage of the total number of available learner days. This performance measure is similar to PM210, but it considers learners instead of educators. Any absence from school by any learner would be taken into account by this performance measure.

Further specifications

Once again, learner absenteeism is likely to impact on the quality of education and ideally should be as close to 0 as possible. Absence due to any reason is considered in this PM. Guidelines used for completing the attendance register at school determines what is considered learner absence in the cases where learners are absent for part of the day. The total number of "Learner days" is computed by multiplying the number of learners in the province with the number of school days as determined annually by the Education Department. The "learner days lost" is computed by adding together the number of days that each learner in the province was absent, irrespective of the reason for non attendance (e.g. illness etc.).

Background

The number of learner days lost impacts on the quality of education and therefore an attempt should be made to minimise this. Learner absenteeism may be a symptom of systemic challenges in the environment (e.g. crime, impact of HIV/AIDS, etc) and as such should receive particular attention from the PED.

Formula

$$P_{LLD} = \frac{\sum LLD}{\sum TLD} * 100$$

Where

P_{LWD} is the percentage of lost learner days in the province

$\sum LLD$ is the sum of the number of lost learner days at all schools in the province. The LLD per school is computed by adding the number of days that each learner was absent.

$\sum TLD$ is the number of learners in the province multiplied by the number of school days as determined by the DOE.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

No actual figures are available to compute this example. The following is an illustrative example based on the learner numbers and targets set by KZN in their annual performance plan.

$\sum LLD = 14{,}054{,}408$ is $\sum TLD = 2{,}783{,}051 * 202 = 562{,}176{,}302$

$$P_{LWD} = \frac{14{,}053{,}408}{562{,}176{,}302} * 100 = 2.5\%$$

Data source

Few provinces currently have accurate data sources to reliably report the learner days lost. Options for collecting this data reliably will be investigated in the future together with EMIS.

This PM can currently not be computed by provinces since accurate data sources are not available. It is envisaged that this information will be obtained by EMIS through the Annual School Survey in future. School Principals should have systems in place at school level which will allow the quick compilation of this figure on an annual basis.

Interpretation

The higher the percentage of lost learner days, the greater the negative impact on the quality of education provided and the greater the need for the province to find effective measures of intervention for this. Provinces should aim to obtain a score as close to 0% as possible.

►PM212: The performance ratio of the least advantaged schools to the most advantaged schools with regard to Grade 3

Definition and purpose

This is the average of the Literacy and Numeracy scores of Grade 3 learners in the poorest schools relative to the average for the least poor learners, expressed as a percentage. It is not only important to tackle the apartheid legacy of unequal spending on learners. It is also important to ensure that inequalities in learner results are reduced, so that learners obtain a more equal start in life.

Further specifications

This PM depends on the Grade 3 assessment in public ordinary schools in the Systemic Evaluation. Although the Systemic evaluation provides results about the level of attainment in the different provinces, the results do not take the quintiles into account and are therefore inapplicable to the calculation of this PM until changes are implemented. This PM will also continue to be a challenge to compute because the Systemic Evaluation is not designed to be implemented on an annual basis. Even if the quintile representation are sorted out, it will not be possible to refresh the figures every year (when the programme is fully operational, it should be possible to refresh the figures every third year).

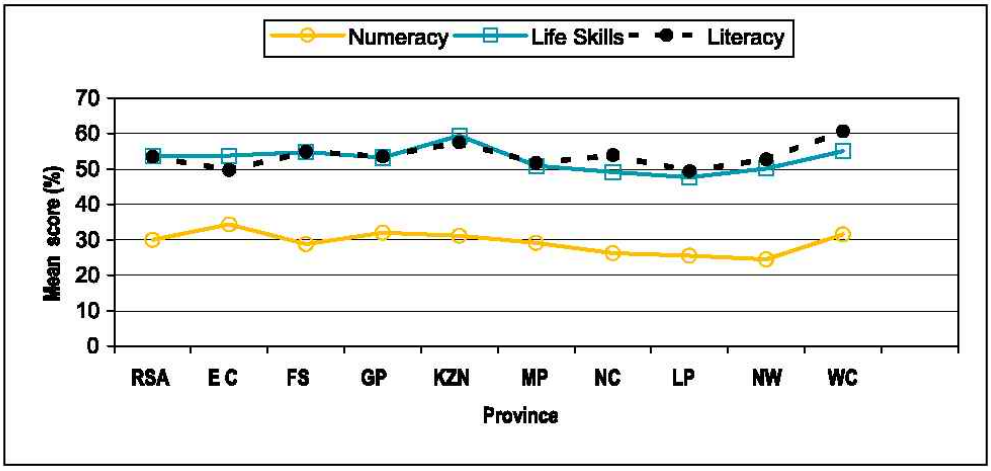
The statistic would be obtained by dividing the average Literacy and Numeracy score of learners from quintile 1 schools by the average Literacy and Numeracy score of

learners from quintile 5. National quintiles would be used. The statistics would be provided by the DoE, as this is a national initiative.

Note that this PM intends to focus on the Literacy and Numeracy attainment of the learners only. Although Life Skills were assessed in the previous Grade 3 Systemic Evaluation, it should not be included in the calculation of this PM. This is not to say that Life Skills as a learning area is not an important one in the Foundation Phase. Current curriculum planning indicates that Life Skills is unlikely to be measured in follow-up rounds of the grade 3 Systemic Evaluation. For the sake of comparability over time, therefore, it would be best to focus only on Literacy and Numeracy in the calculation of this PM.

Background

In terms of the National Education Policy Act of 1996 the DOE has a responsibility to conduct quality control of education. One of the mechanisms that are provided for is the Systemic Evaluation which is intended to be conducted with a statistically representative sample of Grade 3 learners every three years. The results from the first Grade 3 Systemic Evaluation was published in 2003 and indicated that the average performance between provinces differed somewhat.



Source: Systemic Evaluation. Foundation Phase: Mainstream. 2003. Page 32.

This Systemic Evaluation measured learners' competence in terms of Life Skills, Literacy (which contains a listening comprehension component and a reading and writing component) and Numeracy which are the three learning areas that are taught at Foundation Phase. Although this evaluation allowed for some inter-provincial comparisons at a very basic level, the sampling methodology and other research design aspects make it inapplicable to the calculation of this PM in its current form. Only if the sample is changed to adequately represent the different quintiles will PEDs be able to calculate this PM.

Formula

The following formula would be used to calculate the PM once the required data is available:

$$PR3_{Q1/Q5} = \frac{Perf_{Q1}}{Perf_{Q5}} * 100$$

Where

$PR3_{Q1/Q5}$ is the Grade 3 Performance Ratio of the least advantaged schools to the most advantaged schools.

$Perf_{Q1}$ is the average performance of all grade three learners in the sample of quintile 1 schools in the province. This is calculated as follow:

$$Perf_{Q1} = \left(\frac{\sum Lit}{N} * 100 + \frac{\sum Num}{N} * 100 \right) / 2$$

with

$\sum Lit$ Sum all of the Literacy scores for grade 3 learners in quintile 1 schools for the specific province

$\sum Num$ Sum all of the Numeracy scores for grade 3 learners in quintile 1 schools for the specific province

N The number of grade 3 learners in quintile 1 for which Systemic Evaluation scores are available in the specific province.

$Perf_{Q5}$ is the average performance of all grade 3 learners in the sample of quintile 5 schools in the province. This is calculated exactly as for quintile 1.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

No data is available currently to compute an example. PEDs would only be able to compute this once the data collection requirements have been reviewed.

Data source

The last Systemic Evaluation for Grade 3 was conducted in 2003 but the results are currently not available for statistical manipulation. In addition, data for learner performance is not disaggregated by quintile. In fact, the sampling methodology that was used does not allow for statistically representative disaggregating by both province and quintile.

Interpretation

A value lower than 100% would indicate that the learners in the poorest schools are performing weaker than their counterparts in the least poor schools. Although the

long-term policy target should be to obtain a score of 100% on this PM, results from across the world suggest that this is an elusive target. Regression analysis conducted on the grade 3 and grade 6 Systemic Evaluation results indicate that socio economic status is significantly associated with educational attainment: the higher the learner's socio economic status, the higher one would expect his or her attainment to be and the opposite would be true for learners with low socio-economic status.

To obtain a score of 100%, the poorest learners have to perform as well as the least poor learners – E.g. if the combined average Literacy and Numeracy results for quintile 1 learners are 45% and it is 55% for quintile 5 learners, this would yield a result of 81% when you divide 45% by 55%.

PEDs should be careful in how they go about setting targets for this PM. Although a target of 100% is desirable, this should be considered against the absolute performance levels of the different quintiles. In terms of the above mentioned example, it would be possible to obtain 100% if the quintile 1 average increases to 55% or if the quintile 5 average decreases to 45%. Clearly, the latter scenario is undesirable even though it would allow the policy target to be reached.

Once the Systemic Evaluation is repeated on a regular basis, it is expected that the sampling methodology and measurement instruments will be kept similar. If this is not done, PEDs will not be able to compare their performance across different years.

►PM213: Repetition rate in Grades 1 to 7

Definition and purpose

This is the percentage of learners repeating their present grade in Grades 1 to 7, divided by all learners enrolled in Grades 1 to 7. A high repetition rate is both costly, and detrimental for teaching and learning. It is important for this performance measure to be as low as possible.

Further specifications

This PM requires that the number of repeaters from grade 1 to 7 in public ordinary schools is divided by the total number of learners in grade 1 to 7 in public ordinary schools. The result is a percentage value, but PEDs should take care to ensure that the actual numbers on which this percentage is based, is reflected in the relevant statistical table.

Only repeater rates for Grade 1 to 7 are used in this calculation since it allows for an easily comparable cohort of learners across the different provinces. Furthermore, repeater rates for public ordinary schools only are considered.

Learner enrolment figures for the previous year are usually used for this calculation.

Background

According to the education policy, schools may retain a learner in the same grade if the learner did not show acceptable progress after sufficient educational intervention was applied. Learners may only be retained once per phase, that is, once in grades 1 to 3, once in grades 4 – 6 and once in grade 7 – 9. This means that a single learner could be retained for a maximum of three years by the time that he or she reaches grade 7. Retention of learners, although intended to be developmentally supportive to

the individual learners, indicate that learning outcomes are not achieved at the pace at which the Education Department intends it to be achieved. This means that learners take longer to complete their studies and consequently the education expenditure per learner that completes their education increases. However, it is desirable to have some repetition because this indicates that learners who do not achieve the learning outcomes the first time are afforded another opportunity to do so. Some repetition, therefore, is more desirable than having learners drop out of the education system. A very high repetition rate, however, might be indicative of systemic challenges that impact on the quality of education delivered in the schools. It is therefore important that PEDs monitor trends in repetition rates with view of intervening where it is necessary.

Formula

The repetition rate can be calculated with the following formula:

$$R_{Gr1-7} = \frac{R}{N} * 100$$

Where

R_{Gr1-7} is the repetition rate for Grade 1 to 7 learners in all public ordinary schools in the province.

R is the total number of Grade 1 to 7 learners in all public ordinary schools in the province that repeat a grade.

N is the total number of Grade 1 to 7 learners in public ordinary schools in the province as per the previous years' enrolment data.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

Based on the figures from the 2003 ASS, the following example was computed for the Eastern Cape:

$$R = 98{,}645 \qquad N = 1{,}513{,}488$$

$$R_{Gr1-7} = \frac{R}{N} * 100 = \frac{98{,}645}{1{,}513{,}488} * 100 = 6.5\%$$

Data source

Repeater numbers and learner numbers in PEDs should be obtained from available EMIS data sources.

Interpretation

An acceptable target for the repetition rate should be determined by taking into account the situation in each province. Although a repetition rate close to 0% might indicate that the education system is efficient, it may also imply that learners who do not attain acceptable outcomes are not welcome in the education system and choose to drop out. Since Grade 1 – 7 falls within what is compulsory schooling, a high drop out rate and consequent low repetition rate is contrary to what is intended. A repetition rate closer to (or higher than) 10% indicates that the education system is carrying a disproportionate burden with regards to repetition rates and may also indicate that there are systemic challenges in the school context that negatively impacts on the education quality.

►PM214: Percentage of learners in Grade 3 attaining acceptable outcomes in Numeracy and Literacy

Definition and purpose

This performance measure is based on some of the same data as PM212. It indicates the percentage of all Grade 3 learners who, on average, attain acceptable outcomes in Numeracy and Literacy.

Further specifications

Some of the same limitations applying to PM212 apply here: Although this PM does not require the results to be disaggregated by quintile, it still depends on the Grade 3 assessment in the Systemic Evaluation which is currently not implemented on an annual basis. For now it will therefore not be possible to refresh the figures every year (when the programme is fully operational, it should be possible to refresh the figures every third year).

Moreover, the determination of this statistic requires a national benchmark to be set for the Grade 3 Systemic Evaluation. Although it would be in line with current assessment practices to regard any performance higher that 50% in the various learning areas as an indication of attaining acceptable outcomes (Not achieved is usually regarded as anything between 0% - 39%, partly achieved is usually between 40% - 49%, achieved is usually 50% - 69% and outstanding is anywhere between 70% - 100%) this approach would not necessarily take into account instrument standardisation issues. Given that South African learners consistently under-perform when compared with their international peers, careful consideration of the national norms against international benchmarks will be required.

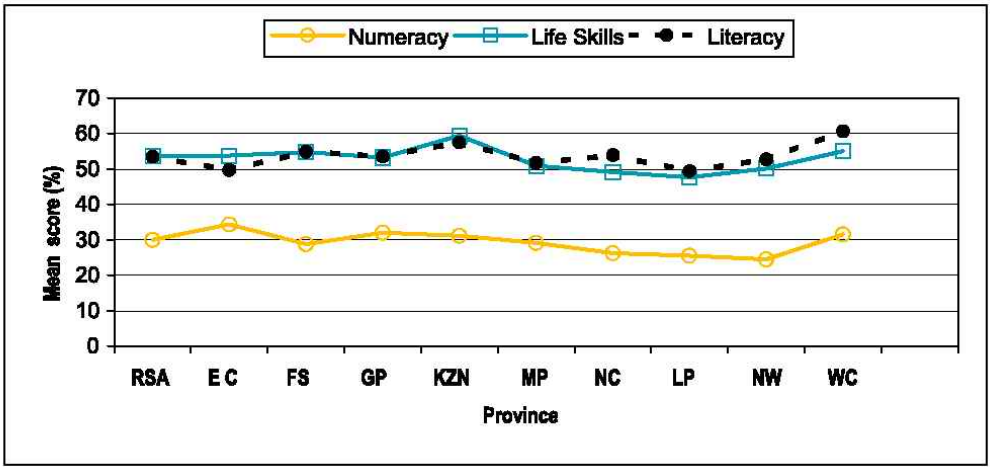
The statistic would be obtained by calculating how many learners met the basic benchmark within each of the learning area (i.e. a learner would have to meet the benchmark in Literacy AND the benchmark in Numeracy) and then dividing it by the total number of learners for which Grade 3 Systemic Evaluation results are available. The statistics should be provided by the DoE, as this is a national programme

Note that this PM intends to focus on the Literacy and Numeracy attainment of the learners only. Although Life Skills were assessed in the previous Grade 3 Systemic Evaluation, it should not be included in the calculation of this PM. This is not to say that the Life Skills as a learning area is not an important one in the Foundation Phase. Current curriculum planning indicates that Life Skills is unlikely to be measured in follow-up rounds of the grade 3 Systemic Evaluation. For the sake of

comparability over time, therefore, it would be best to focus only on Literacy and Numeracy in the calculation of this PM.

Background

Historically, the annual Grade 12 exam results have been the only general measure of education quality available. Although there is a wide recognition that education quality should also at least consider the performance of learners at the end of the Foundation Phase, Intermediate Phase and the Senior Phase, resources and capacity to provide general system-wide results have been limited. The Systemic Evaluation is an attempt to address this need although results are only available every three years. The first Grade 3 Systemic Evaluation was published in 2003 and indicated that the average performance between the provinces differed somewhat. It also clearly illustrated that learners' attainment in Numeracy, Literacy and Life Skills were at different levels. Although these differences could in part be attributed to measurement effects, the results indicate that different benchmarks for defining "acceptable performance" might be required. (See the following graph)



Source: Systemic Evaluation. Foundation Phase: Mainstream. 2003. Page 32.

Since the Systemic Evaluation is conducted with only a sample of learners, the issue of sampling error would be applicable in the calculation of this PM. Although it was not possible to investigate the sampling errors associated with the Grade 3 Systemic Evaluation, it is likely to be somewhat problematic for generalisations to different provinces.

Although this evaluation allows for some inter-provincial comparisons at a very basic level, the sampling methodology and other research design aspects make it inapplicable to the calculation of this PM in its current form.

Formula

$$Gr3Min = \frac{L}{N} * 100$$

Where:

$Gr3Min$ is the percentage of learners that obtained acceptable outcomes in Literacy and Numeracy

L is the number of grade 3 learners that obtained acceptable outcomes in Literacy and Numeracy

N is the number of grade 3 learners for whom Systemic Evaluation results are available in the province

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

The grade 3 Systemic Evaluation data is currently not available to compute an example.

Data source

The last Systemic Evaluation for Grade 3 was published in 2003 but the results are currently not available for statistical manipulation. In future, these statistics will be made available by the DOE.

Interpretation

Since the Systemic evaluation is based on a sample of learners, issues of sampling errors and confidence intervals are applicable.

No benchmark is set for this PM since it has never been calculated before. Obviously, a result close to 100% would be desirable since this implies that 100% of the learners have at least the minimum competence in the areas of Literacy, Numeracy and Life Skills.

Also note that this PM requires PEDs to report the percentage of learners that obtain acceptable outcomes which is quite different from the average percentage scored by learners in the different learning areas.

PEDs should carefully consider whether sampling changes or measurement changes are implemented from one cycle to the next, since this will impact on the comparability of results.

►PM215: Percentage of learners in Grade 6 attaining acceptable outcomes in Mathematics, Literacy, and Natural Sciences

Definition and purpose

This performance measure indicates the percentage of all Grade 6 learners who, on average, attain acceptable outcomes in Mathematics, Literacy and Natural Science. It is similar to PM214 except that it focuses on Grade 6 learners instead of Grade 3 learners and focuses on the learning areas of Mathematics, Literacy (this is the language of teaching ad learning) and Natural Sciences.

Further specifications

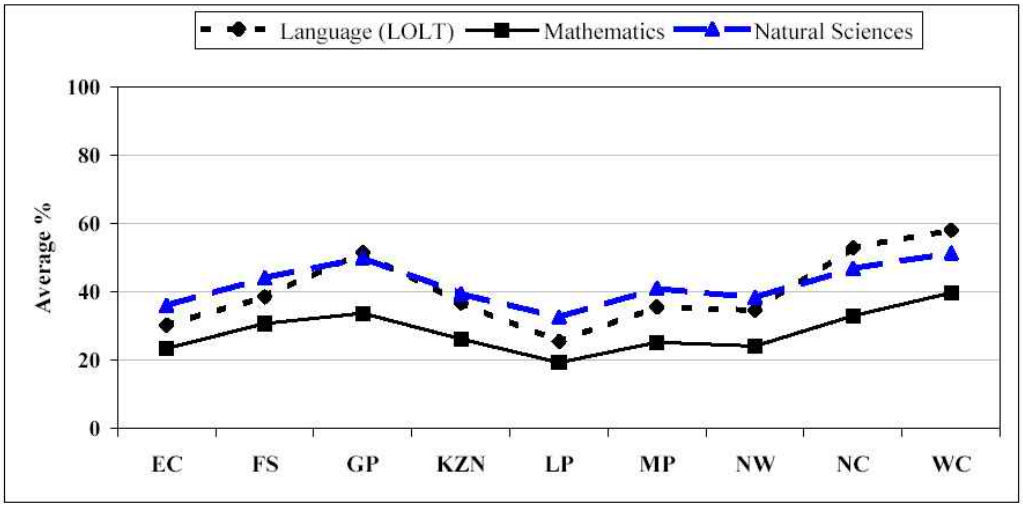
This PM depends on the Grade 6 assessments in the Systemic Evaluation. As this programme is not implemented on an annual basis, for now it will not be possible to refresh the figures every year (when the programme is fully operational, it should be possible to refresh the figures every third year).

Moreover, the determination of this statistic requires a national benchmark to be set for the Grade 6 Systemic Evaluation. Although it would be in line with current assessment practices to regard any performance higher that 50% in the various learning areas as an indication of attaining acceptable outcomes (Not achieved is usually regarded as anything between 0% - 39%, partly achieved is usually between 40% - 49%, achieved is usually 50% - 69% and outstanding is anywhere between 70% - 100%) this approach would not necessarily take into account instrument standardisation issues. Given that South African learners consistently under-perform when compared with their international peers, careful consideration of the national norms against international benchmarks will be required.

The statistic would be obtained by calculating how many learners met the basic benchmark within each of the learning areas (i.e. a learner would have to meet the benchmark in Literacy, the benchmark in Mathematics AND the benchmark in Natural Sciences) and then dividing it by the total number of learners for which Grade 6 Systemic Evaluation results are available. The statistics should be provided by the DoE, as this is a national initiative.

Background

Historically, the annual Grade 12 exam results have been the only general measure of education quality available. Although there is a wide recognition that education quality should also at least consider the performance of learners at the end of the Foundation Phase, Intermediate Phase and the Senior Phase, resources and capacity to provide general system-wide results have been limited. The Systemic Evaluation is an attempt to address this need although results are only available every three years. The first Grade 6 Systemic Evaluation was published in December of 2005 and indicated that the average performance between the provinces differed somewhat. It also clearly illustrated that learners' attainment in Mathematics, Literacy and Natural Sciences are at different levels. These results indicate that different benchmarks for defining "acceptable performance" might be required. (See the following graph)



Source: Systemic Evaluation. Intermediate Phase: National. 2005. Page 83.

Since the Systemic Evaluation is conducted with only a sample of learners, the issue of sampling error would be applicable in the calculation of this PM. Although it was not possible to investigate the sampling errors associated with the Grade 6 Systemic Evaluation, it is likely to be somewhat problematic for generalisations to different provinces.

Although this evaluation allows for some inter-provincial comparisons at a very basic level, the sampling methodology and other research design aspects make it inapplicable to the calculation of this PM in its current form.

Formula

$$Gr6Min = \frac{L}{N} * 100$$

Where:

$Gr6Min$	is the percentage of grade 6 learners that obtained acceptable outcomes in Literacy, Mathematics and Natural Sciences
L	is the number of grade 6 learners that obtained acceptable outcomes in Literacy, Mathematics and Natural Sciences in the province.
N	is the number of grade 6 learners for whom Systemic Evaluation results are available in the province

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

The grade 6 Systemic Evaluation data is not available at the moment to compute an example.

Data source

The last Systemic Evaluation for Grade 6 was published in 2005 but the results are currently not available for statistical manipulation. In future, these statistics will be made available by the DOE.

Interpretation

Since the Systemic evaluation is based on a sample of learners, issues of sampling errors and confidence intervals are applicable.

No benchmark is set for this PM since it has never been calculated before. Obviously, a result close to 100% would be desirable since this implies that 100% of the learners have at least the minimum competence in the areas of Literacy, Mathematics and Natural Sciences.

Also note that this PM requires PEDs to report the percentage of learners that obtain acceptable outcomes which is quite different from the average percentage scored by learners in the different learning areas.

PEDs should carefully consider whether sampling changes or measurement changes are implemented from one cycle to the next, since this will impact on the comparability of results.

►PM216: Percentage of girl learners who take Mathematics and Science in Grades 10 to 12

Definition and purpose

This is the percentage of female learners who are enrolled in Mathematics and Science in Grades 10, 11 and 12. Historically, girls have been under-represented in these subjects, so increased participation in them would be an important indicator of the move towards a more gender-balanced FET band.

Further specifications

Ideally this PM should be calculated by taking into account the number of girl learners that take both Mathematics and Science at FET level. Currently, the data sources at the disposal of the Education Department only provide information on the number of male and female learners that are enrolled in each learning area. Until the National Learner Records Database is completed, it will not be possible to determine which learners take both Mathematics and Science at FET level. Therefore, for the calculation of this PM we will assume that the number of girl learners enrolled in Science adequately represents the number of learners who take both Science and Mathematics. Although this assumption is not entirely accurate, in most instances learners who take Science also take Mathematics. All girls enrolled in independent and public ordinary schools are considered for this PM since the available data source covers these learners.

Background

Historically, girls have been discouraged to enrol in Mathematics and Science in the FET band for a variety of reasons. One of these reasons pertain to unfair gender stereotyping in the home and school environments. This has a significant impact on the career choices that are available to women, and consequently on the human

capital development potential of the country. According to the “Facing the Facts” study conducted by the Department of Science and Technology, women are still underrepresented (as compared to men) in Science, Engineering and Technology careers. Although female enrolments in Science, Engineering and Technology courses at tertiary education institutes has increased over the past years, the lingering disproportionate representation of women is often seen as a pipeline issue that starts with blockages at school that prevent women from entering Science, Engineering and Technology careers. This PM does not merely focus on the enrolment of girls in the FET band, but specifically on the enrolment of girls in the learning areas where they are historically critically under-represented.

Formula

To calculate the percentage of girls that take Mathematics and Science in Grade 10 to 12, the following formula should be used.

$$MSG = \frac{MS}{N} * 100$$

MSG is the percentage of girls that take both Mathematics and Science in Grades 10 to 12 in public ordinary schools in the province.

MS is the number of girls that take Science in Grades 10 to 12 in public ordinary schools in the province.

N is the total number of girls in Grades 10 to 12 in public and independent ordinary schools in the province.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

Data on the number of learners enrolled in each of the learning areas was not available to the DOE at the time of finalising this specification.

Data source

The Annual School Survey contains information on the number of male and female learners that take Mathematics and Science in Grades 10 – 12, and also provides an indication of the total number of learners in these grades. Figures from the most recent ASS should be used for this PM.

Interpretation

It is to be expected that not all girl learners would continue with both Science and Mathematics in the FET phase. Therefore a target of 100% is not likely to be achieved. PEDs should be encouraged to evaluate the situation by aiming to incrementally increase the percentage of girl learners who take Maths and Science from one year to the next.

►PM217: The performance ratio of the least advantaged schools to the most advantaged schools with respect to the grade 12 pass rate

Definition and purpose

This is the average of the Senior Certificate marks of Grade 12 learners in the poorest schools relative to the average for the least poor learners, expressed as a percentage. This performance measure is thus similar to PM212.

►PM218: Repetition rate in Grades 8 to 12

Definition and purpose

This is the percentage of learners repeating their present grade in Grades 8 to 12, divided by all learners enrolled in Grades 8 to 12. A high repetition rate is both costly, and detrimental for teaching and learning. It is important for this performance measure to be as low as possible. This is the same as PM213, except that this performance measure deals with Grades 8 to 12.

Further specifications

This PM requires that the number of repeaters from grade 8 to 12 in public and independent ordinary schools is divided by the total number of learners in grade 8 to 12 in public and independent ordinary schools. The result is a percentage value, but PEDs should take care to ensure that the actual numbers on which this percentage is based, is reflected in the relevant statistical table.

Only repeater rates for Grade 8 to 12 are used in this calculation since it allows for an easily comparable cohort (what would be in most cases secondary school learners) of learners across the different provinces. Furthermore, repeater rates for public and independent ordinary schools only are considered in this PM.

The learner numbers of *the previous year* is used in this calculation as this is the convention for calculating repeater rates.

Background

According to the education policy, schools may retain a learner in the same grade if the learner did not show acceptable progress after sufficient educational intervention was applied. Retention of learners, although intended to be developmentally supportive to the individual learners, indicate that learning outcomes are not achieved at the pace at which the Education Department intends it to be achieved. This means that learners take longer to complete their studies and consequently the education expenditure per learner that completes their education increases. In one sense, however, it is desirable to have some repetition because this indicates that learners who do not achieve the learning outcomes the first time are afforded another opportunity to do so. Some repetition, therefore, is more desirable than having learners drop out of the education system. A very high repetition rate, however, might be indicative of systemic challenges that impact on the quality of education delivered in the schools. It is therefore important that PEDs monitor trends in repetition rates with view of intervening where it is necessary.

Formula

The repetition rate can be calculated with the following formula:

$$R_{Gr8-12} = \frac{R}{N} * 100$$

Where

R_{Gr8-12} is the repetition rate for Grade 8 to 12 learners in public ordinary schools in the province.

R is the number of Grade 8 to 12 learners in public ordinary schools that repeat a grade.

N is the total number of Grade 8 to 12 learners in public ordinary schools *in the previous year*.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

Based on the repeater numbers from the 2003 ASS the following example for the Eastern Cape was computed:

$$R = 72{,}528 \qquad N = 1{,}504{,}068$$

$$R_{Gr8-12} = \frac{R}{N} * 100 = \frac{72{,}528}{629{,}061} * 100 = 11.5\%$$

Data source

Repeater numbers and learner numbers in PEDs should be obtained from available EMIS data sources.

Interpretation

An acceptable target for the repetition rate should be determined by taking into account the situation in each province. Although a repetition rate close to 0% might indicate that the education system is efficient, it may also imply that learners who do not attain acceptable outcomes are not welcome in public ordinary school and choose to drop out. Since Grade 10 – 12 falls outside of compulsory schooling, a higher drop out rate and consequently lower repetition rate might be expected. Given that the higher grades make more demands of learners in terms of attaining outcomes, it is not uncommon for the repeater rates in Grade 8 – 12 to exceed 5%. A repetition rate closer to (or higher than) 10% indicates that the education system is carrying a disproportionate burden with regards to repetition rates and may also indicate that there are systemic challenges in the school context that negatively impacts on the education quality.

►PM219: Pass ratio in Grade 12 examinations

Definition and purpose

This is the total number of Senior Certificate passes in a year, divided by the total number of 18 year olds. This is not the same as the Matric pass rate. This

performance measure takes into account two things. Firstly, it takes in account how many youths are participating in the examinations. Secondly, it takes into account how many youths who write the examinations, also pass them.

Further specifications

This PM intends to track how many learners pass the Senior Certificate Examination as expressed in terms of the expected number of learners who would be eligible to write the examinations.

Although many of the learners that annually pass the Senior certificate examinations are not 18 years old (i.e. they are older or younger than 18 years old), one would expect that the majority of the learners that write the examinations are 18 years turning 19 in the year of the examination. Therefore, the population of 18 year olds in any given year is used as the denominator in the calculation of this PM.

Additionally, many 18 years olds never write the Senior Certificate examination because they are still busy with earlier grades or have left the school system to pursue other options (e.g. work or enrolment in an FET college).

Expressing the number of passes in terms of the number of 18 year olds in the province is, however, a convenient measure to consider successful school participation.

Background

Annually, a lot of focus is placed on the Matric pass rate which indicates how many of the learners that actually wrote the Senior Certificate Examination passed. Considering this statistic alone, however, obscures the issue of non-participation and drop out. Something that this PM intends to address. If only half of the 18 year olds in a province sit for the Senior Certificate examination, attaining an 80% pass rate is not a clear victory. Many of the 18 year olds that did not write the examination may still be busy with lower grades due to earlier failure to attain the requisite outcomes and many others may have dropped out of the education system. This PM, therefore provides a clearer indication of the performance of the education system at one of its critical exit points.

Formula

The following formula applies to the calculation of this PM:

$$PR = \frac{LP}{N_{18}} * 100$$

Where:

PR is the Pass Ratio, i.e. the number of Senior Certificate Passes expressed as a percentage of the total population of 18 year olds in the Province.

LP is the total number of learners that passed the Senior Certificate Examination in the Province in a given year.

N_{18} is the total population of 18 year olds in a Province in any specific year.

Example

The 2004 figures for EC is used in the following example:

$$LP = 33{,}915 \qquad N_{18} = 163{,}732$$

$$PR = \frac{33{,}915}{163{,}732} * 100 = 20.7\%$$

The pass ratio for the EC in 2004 is 20.7% whilst the percentage of learners that successfully completed the examinations out of the total number of learners that wrote the examinations were reported to be 53.5%

Data source

The senior certificate examination report for the previous year should be consulted to obtain the denominator in the abovementioned formula. The population of 18 year olds should be determined from the population estimates provided by the DOE.

Interpretation

Obtaining a value lower than 100% does not necessarily constitute a failure on the part of the Education Department, since other avenues of study are available to learners and would therefore contribute towards a lower participation in the Senior Certificate Examination. PEDs should, however, endeavour to increase both participation of learners that would otherwise drop out of the education system and decrease the number of repeaters whilst aiming to achieve high pass rates. It is therefore applicable to set targets for this PM that take the current situation into account and incrementally increase over time.

►PM220: Pass ratio in Grade 12 for Mathematics and Science

Definition and purpose

This is the total number of learners who pass either the Mathematics or Science Senior Certificate examinations in a year, divided by the total number of 18 year olds. Like the overall pass ratio (see PM217), this performance measure provides an idea of how much output the education system is producing relative to the population.

***►PM221: Percentage of learners in Grade 9 attaining acceptable educational outcomes* in all learning areas**

Definition and purpose

This performance measure indicates the percentage of all Grade 9 learners who, on average, attain acceptable educational outcomes across all of the senior phase learning areas. It is similar to PM214 and PM215 except that this PM focuses on

Grade 9 learners instead of Grade 3 or Grade 6 learners, and it takes into account attainment in all of the learning areas.

Further specifications

Although there are no systematically collected comparable data available to compute this PM, two potential information sources might become available in the future. On the one hand this PM might focus on the results of the Grade 9 Systemic evaluation once they become available. On the other hand the results of the GETC examinations might be more appropriate since it could provide annual updates on the data. At this stage though, neither of these data sources are being collected systematically.

Background

Historically, the annual Grade 12 exam results have been the only general measure of education quality available. Although there is a wide recognition that education quality should also at least consider the performance of learners at the end of the Foundation Phase, Intermediate Phase and the Senior Phase, resources and capacity to provide general system-wide results have been limited. Although Grade 9 represents a potentially significant exit point from the education system (being at the end of the compulsory General Education & Training) it is unlikely that the level of resources spent on the GETC examinations would ever be comparable to the Grade 12 examinations. This presents the challenge of not having standardised, comparable information across different provinces about Grade 9 learners' educational attainment.

The Systemic Evaluation which is planned for Grade 9 too, is an attempt to address this need, although this would also only be updated once every three years.

Formula

To be determined once the data source is established

Example

To be provided once the data source is established

Data source

Either the GETC or the Grade 9 Systemic Evaluation results may become available in future.

Interpretation

To be elaborated once the data source is established.

►PM301: Percentage of funded independent schools visited for monitoring purposes

Definition and purpose

This is the percentage of independent schools receiving a government subsidy that are visited for quality control purposes by the Department during the year. It is important that government should monitor the quality of education delivered in

independent schools, and especially those receiving state subsidies, and take action where minimum standards are not met.

Further specifications

For this PM the number of independent schools that received at least one monitoring visit from the province is divided by the total number of independent schools that receive a government subsidy in the province.

The monitoring visits that are of interest in this PM are specifically described in the National Norms and Standards for School Funding for independent schools. All independent schools that request funding from the Department should be subjected to a management checklist which will determine whether the school is able to manage public funding responsibly. After the initial approval has been granted, PEDs also have the responsibility to carry out unannounced inspections to ensure that the school's practices are up to date in terms of the checklist. The checklist should include items relating to the school's capacity to handle and account for public funds, the capacity to meet ongoing contractual obligations to suppliers of goods and services and the ability to make financial decisions that are educationally sound. The monitoring visits that this PM intends to track are therefore related to specifically checking enrolment figures against subsidy claims and ensuring that quality education is being delivered.

Background

In terms of the South African Schools Act any person has the right to establish and maintain an independent school at his or her own cost, and certain grounds are set on which a PED must register an independent school. Independent schools may, if they so wish, apply for funding from the PED based on a set of clearly defined criteria.

These criteria include that the independent school must be registered by the PED; must have made an application to the PED in the prescribed manner, has been operational for one full school year; is not operated for profit, is managed successfully according to a management checklist determined by the PED, agrees to unannounced inspection visits by officials of the PED, and has not been established in direct competition with a nearby uncrowded public school of equivalent quality. Additionally if it is a secondary school the school must maintain a grade 12 pass rate of 50% or more, the repetition rate in grades 11 or 12 is not more than 20%; and it does not engage in practices that are calculated to artificially increase the school's grade 12 pass rate.

If public funds are used to subsidise these independent schools, PEDs have the responsibility to ensure that the expenditure is worthwhile. The burden for quality management is not only something that falls to provinces when a subsidy is approved, but is something that the provinces should monitor on an ongoing basis.

Formula

$$IM = \frac{S}{N} * 100$$

Where:

IM is the percentage of independent schools in the province that were visited for monitoring purposes.

S is the number of independent schools that were visited for monitoring purposes. Note this is not the same as the number of monitoring visits conducted by officials since multiple visits to the same school should be counted as 1 school visited.

N is the total number of independent schools that receive a government subsidy in the province

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

No provincial data was available for the calculation of an example, although PEDs would be in the position to access this data from their own administrative systems.

Data source

Management of the provincial monitoring and quality control divisions in charge of independent schools in the various PEDs should have this information available.

Interpretation

Provinces are required to monitor the enrolment figures and quality of programming at independent schools, but it is not always practically feasible, nor is it legally mandated, to visit *all* of the independent schools in the province. PEDs have the responsibility to ensure that a critical random sample of independent schools is monitored on an annual basis. The absolute number percentage of schools that should be visited might differ from province to province, especially since some provinces have a greater concentration of independent schools than others.

It is therefore unreasonable to expect a result of 100% on this PM. A more constructive approach towards the interpretation of this PM would be to compare it to past performance and set targets for the future that commits to incremental improvement over time.

►PM401: Percentage of children with special needs of compulsory school going age not enrolled in educational institutions

Definition and purpose

This is the percentage of disabled children of compulsory school-going age not enrolled in any educational institution. It is important that government should provide sufficient and appropriate access to special and public ordinary schools for these learners. Ideally, this performance measure should carry a value of 0%.

Further specifications

This PM should be clearly distinguished from PM202 which deals with the percentage of LSEN learners in public ordinary schools. Although Annual School Survey data is available to make estimates about the LSEN in schools, this is

obviously not available for LSEN who are out of school. General Household Survey data should be used for the calculation of this PM.

For the purposes of this PM children of compulsory school going age include anyone of age 7 to 14. The population of children of the age 7 – 14 years that have special needs can easily be determined from the GHS since the age of the person is clearly indicated and a question is included to find out if someone is disabled: The GHS asks of each household member whether he/she is "limited in his/her daily activities, at home, at work or at school, because of a long-term physical, sensory, hearing, intellectual, or psychological condition, lasting six months or more?". The percentage of these individuals that are out of school can also be determined since the GHS includes a question which asks whether someone is currently attending school.

Background

As explained under PM202, the Ministry of Education appointed the National Commission on Special Needs in Education and Training and the National Committee on Education Support Services to investigate the provision of education to learners with Special Education Needs. The bodies confirmed that learners with disability experienced great difficulty in gaining access to education. Very few special schools existed and they were limited to admitting learners according to rigidly applied categories. Learners who experienced learning difficulties because of severe poverty did not qualify for educational support. The categorisation system allowed only those learners with organic, medical disabilities access to support programmes. The impact of this policy was that only 20% of learners with disabilities were accommodated in special schools. The World Health Organisation has calculated that between 2.2 % and 2.6 % of learners in any school system could be identified as disabled or impaired. White Paper 6 estimated that an application of these percentages to the South African school population would project an upper limit of about 400,000 disabled or impaired learners. Statistics at the time showed that only about 64,200 learners with disabilities or impairments were accommodated in about 380 special schools. This indicates that, potentially, 280,000 learners with disabilities or impairments were unaccounted for. This PM aims to partially account for those LSEN that are excluded from any education.

The education and training system intends to promote education for all and foster the development of inclusive and supportive centres of learning that would enable all learners to participate actively in the education process so that they could develop and extend their potential and participate as equal members of society.

Formula

$$SPEC_{7-14} = \frac{D_{7-14}}{Z_{7-14}} * 100$$

Where

$SPEC_{7-14}$ is the percentage of Learners with special education needs between the ages of 7 and 14 that do not attend any educational institution.

D_{7-14} is the number of 7 to14 year old LSEN that do not attend school.

Z_{7-14} is the number of 7 to14 year old LSEN in your province.

Example

For EC, the 2004 GHS provides the following values:

$$D_{7-14} = 4{,}588 \qquad Z_{7-14} = 13{,}714$$

$$SPEC_{7-14} = \frac{4{,}588}{13{,}714} * 100 = 33.5\%$$

Data source

Relevant questions from the most recent General Household Survey should be used.

Interpretation

The percentage computed under this PM indicates how many LSEN are not being accommodated at all in the education system. Since government made the commitment to provide "education for all" the policy target for this PM is 0% which means that none of the LSEN of compulsory school going age should be left out. Based on the 2004 GHS data, however, this PM ranges between 10.3% in the WC and 65.1% in KZN with a national non-participation rate of approximately 40.8%. Note that because the data originates from the General Household Survey, the issue of sampling errors and confidence intervals are applicable here.

►PM501: Number of FET college students relative to youth in the province

Definition and purpose

This is the number of FET college students, of all ages, divided by youth aged 16 to 18. Whilst many FET college students would be above age 18, this performance measure nonetheless provides a useful indication of how well FET colleges are reaching out to the youth and the population as a whole.

Further specifications

For the calculation of this PM, the age cohort consisting of all 16 to 18 year olds are selected. This is not because it is meant to be a reflection of who the FET colleges are targeting - Many 16 to 18 year olds are in school and, and many more people outside of this cohort attend colleges. It is, however, a convenient category to use in order to identify what the reach of FET colleges is in relation to the funding it receives, and in order to compare the performance of PEDs to each other. Actual headcounts are used and not FTEs (full-time teaching equivalents).

Background

To engage with this PM it is important that the difference between headcounts and FTEs (full-time teaching equivalents) are clearly understood since it has an impact on the interpretation and use of the findings. When headcounts are used, the number of individual students enrolled for study is considered. FTEs consider the number of full-time students enrolled for 1 year. For example, a student studying full-time for a year course would be 1 FTE while a student studying full time for a six-month semester course would be 0.5 FTE. It is likely that the headcounts might be greater than the FTEs and therefore the headcount is not a good indicator of what is required in terms of resources to adequately deal with the FET sector. Headcounts are a good way of

finding out what the reach of FET colleges is, but FTEs are better to use when resource planning is conducted. In fact, for accurate budget planning, FTEs need to be weighted. The weighted FTE takes into account practical and workshop course weightings. Depending on the type of programme offered by the institution weighted FTEs might be higher than unweighted FTEs.

Formula

$$FET_{16-18} = \frac{E_{16-18}}{P_{16-18}} * 100$$

Where

FET_{16-18} is the percentage of 16 to 18 year olds enrolled in FET Colleges in the province.

E_{16-18} is the population aged 6 to 18 enrolled in any FET College in the Province.

P_{16-18} is the population aged 16 to 18 in the Province.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

For Eastern Cape the FET_{16-18} is calculated as follow:

$E_{16-18} = 34{,}854$ (Education Statistics at a Glance, 2004, based on the 2002 NBI survey)

$P_{16-18} = 483{,}691$ (General Household Survey)

$$FET_{16-18} = \frac{34{,}854}{483{,}691} * 100 = 7.2\%$$

Data source

For non-census years the population figures should be obtained from the most recent General Household Survey or population estimates as provided by the DOE. FET Headcounts should be obtained from EMIS systems.

It is recommended that population estimates and self reported FET enrolment figures are obtained from the most recent General Household Survey. The enrolment figures could be cross checked against the enrolment figures provided by EMIS.

Interpretation

The higher the percentage, the greater the reach of FET colleges and the better the performance on this PM. PEDs should be mindful of the fact that headcounts and not weighted FTEs are used in this PM.

Overlap with other indicators

It is important to distinguish this PM from other indicators that have been used to describe similar information about FET college enrolment. In the 2004 Quantitative review of FET colleges published by the DOE, two other indicators seem to agree somewhat with this PM.

Gross Participation Rate: In the 2004 Quantitative Survey this expresses the ratio of the total head count of students to the total population. Note that this indicator is interested in enrollment of FET students of *all ages* out of the South African population *of all ages.* Since the PM under consideration is interested in the participation rate of a cohort only, it is not comparable to the gross participation rate as included in the 2004 Quantitative Survey.

Net Participation Rate: In the 2004 Quantitative Survey this expresses the ratio of the total headcounts of students in the cohort of 15-29 year olds to the total population in the same age cohort. Although this indicator extracts the participation rate of a specific age cohort, it is not comparable to the PM under discussion since it considers 15-29 year olds while the PM is interested in the age cohort of 16 – 18 year olds.

►PM502: Percentage of female students who are in technical fields

Definition and purpose

This is the percentage of all female FET college students who are enrolled in engineering or other technical fields. Historically, enrolment of females in these fields has been low. In the interests of gender equity, this situation should improve.

►PM503: FET college throughput rate

Definition and purpose

This is the number of students who pass the final examinations, divided by the total number of students who entered the FET college system with the intention of passing the examinations.

Clarity must be obtained on this indicator. It has repeatedly been used in the 'Quantitative Overview' analyses of the college sector, but the methodology is not properly explained in these reports.

►PM504: Percentage of learners placed in learnerships through FET colleges

Definition and purpose

This is the learners in learnerships receiving their training through an FET college, as a percentage of all learners in learnerships in the province. This performance measure indicates how effective FET colleges are at attracting learners from the learnership system.

►PM601: Number of ABET learners relative to adults in the province

Definition and purpose

This is the number of students enrolled in public ABET centres, divided by the total number of adults in the province. This percentage provides an indication of how extensive the public provisioning of ABET is in the province.

Further specifications

For the purposes of calculating this PM, an adult is any person aged 19 years and older. This is in alignment with the definition used in PM005. ABET is intended for people above school going age and the equitable share formula regards anyone up to age 18 as eligible for school or FET college, therefore 19 years old as bottom limit is appropriate. There is no upper age limit for this PM since any adult with limited literacy or skills needs, no matter how old, are regarded as a potential ABET learner. Although people who have completed schooling or tertiary education are not necessarily targeted by ABET centres, they are not excluded from the numerator in this calculation, since this is a PM expressing general enrolment. It is therefore important to consider this PM together with the adult literacy rates in the province.

Any skills training programme or literacy class provided through ABET centres (Excluding SETA provisioning) should be considered for this PM. This PM also intends to only focus on publicly funded ABET and should exclude enrolment in privately funded ABET initiatives.

Background

Adult Education statistics have been hotly debated by civil society, the general public and the Department of Education. Since different sources are used to compile these statistics, contradictions are often found. Despite the contradictions in the data sources, it is evident that ABET are only available for a small a percentage of adult learners who would be eligible for it. In addition, very few of the enrolled learners complete their qualifications. Although this PM does not reflect on the plethora of issues related to ABET provisioning in this country, it does provide a catch-all indicator that could be used to track the improvement of PEDs' performance with regards to ABET.

This PM intends to only reflect on publicly funded ABET for which the PEDs are responsible, that is, ABET provided by centres funded directly by the Education Department. This includes literacy classes and skills training classes of any kind (as recognised within the National Qualifications Framework) provided by public ABET centres.

it is important to bear in mind that ABET is provided through multiple other channels in South Africa too. Firstly, it is frequently provided by centres and service providers contracted through the relevant Sector Education and Training Authorities (SETAs). Many NGOs and privately funded institutions also provide ABET classes in areas of need.

The challenge of obtaining accurate data on publicly funded ABET participation may still continue for some time into the future and is something that the PEDs should continually try to improve. As an additional estimate it is recommended that PEDs compare their figures with figures that are available in the GHS. The GHS asks of a sample of people whether they are enrolled in any educational institution, which also

includes the options “Adult basic education and training/literacy classes” and “Other adult educational classes”. This question does not distinguish between publicly and privately funded ABET and also does not ensure that the respondents report participation in accredited ABET that falls within the NQF framework. It provides some estimate of participation in ABET, albeit a somewhat higher estimate than what this PM may yield.

Formula

$$ABET_{19+} = \frac{E_{19+}}{P_{19+}} * 100$$

Where

$ABET_{19+}$ is net enrolment rate in ABET for ages 19 years and older in the Province.

E_{19+} is population aged 19 and older enrolled in any publicly funded ABET centre or programme (Enrolment figures from EMIS should be included) in the Province.

P_{19+} is population aged 19 and older in the Province.

The preferred format is a percentage with one decimal. PEDs should ensure that the absolute numbers used in the computation of this PM are reflected in the relevant statistical table.

Example

For EC the ABET enrolment figures are calculated as follow:

$$E_{19+} = 46{,}786 \qquad P_{19+} = 3{,}650{,}009$$

Note that E19+ is obtained from the 2004 Education Statistics at a Glance publication. For EC these numbers are reported to come from the 2003 Annual ABET survey.

P19+ is obtained from the General Household Survey population figures

$$ABET_{19+} = \frac{46{,}786}{3{,}650{,}009} * 100 = 1.3\%$$

This could be cross-checked against the GHS data that indicates self reported enrolment in any kind of ABET. For the EC this is:

$$E_{19+} = 8{,}124 \qquad P_{19+} = 3{,}650{,}009$$

$$ABET_{19+} = \frac{8{,}124}{3{,}650{,}009} * 100 = 0.2\%$$

There is a discrepancy of about 1% in these figures.

Data source

EMIS figures are used to establish the number of adults in ABET centres. In some provinces these EMIS figures originate from the 2003 Annual ABET Survey. For non-census years the population figures for adults are obtained from the General Household survey for the year in question or population estimates as provided by the DOE. As an additional check, provinces may want to estimate the ABET enrolment using the GHS item asking adults to report if they are enrolled in any ABET literacy or skills training programme (publicly or privately funded). If the variance between these two figures are more than 3%, then the data quality should be investigated.

Interpretation

This PM should be interpreted in the context of adult illiteracy, the skills levels of adults and the various options for accessing ABET. The higher the value of this PM, the better PEDs are succeeding in providing public ABET to adult learners. Given that adult illiteracy is a challenge experienced in all provinces the ideal would be to get as many of the illiterate individuals involved in ABET as possible. It should, however, be borne in mind that public ABET is not the only vehicle for these people to address their skills deficits. The policy target should be to achieve incremental increase in the enrolment rates in publicly funded ABET from year to year.

►PM701: Percentage of learners in publicly funded Grade R

Definition and purpose

This is the total number of learners in publicly funded Grade R (in public schools or community centres), divided by all five year olds in the population. Whilst it is not government's aim to reach 100% with respect to this performance measure (some learners can be expected to attend private centres), policy stipulates that by 2010 we should have reached a high level, of between 80% and 90%.

There are detailed specifications for 31 PMs. For the remaining 8 PMs, detailed specifications are still incomplete with regard to background, formula, example, data source and interpretation. These are currently work in progress at this stage and will be provided to PEDs once they are available. Please note that slight changes were made to the specifications for PM104, PM201 and PM202 since the last manual was distributed. Specifications for PM003, PM206, PM210, PM211, PM212, PM213, PM214, PM215, PM216, PM218, PM219, PM221, PM301, PM401, PM501 and PM601 were added since the last manual,

3 TOOLS AND APPENDICES

3.1 Skills menu and level of effort calculations

3.2 The spreadsheet tool

This tool is found in the Excel file named ***Tabulation tool 050404.xls***. It does not matter that this tool has a different date to the date of this manual. The tool is changed less frequently, due to the fact that changes to the tool complicate data work in the PEDs to a much greater degree than do changes in the manual.

The tabulation tool is intended to assist PEDs in the compilation of data, calculation of statistics, and formatting of numbers as required for the statistical tables. The spreadsheet tool is designed to aggregate figures correctly only for those provinces using the eight standard budget programmes. This means that KwaZulu-Natal is not able to use the tool fully whilst the province's ninth programme continues to exist.

Fuller specs and guides to follow for the spreadsheet tool.

3.3 The document skeletons

Skeletons of the plans and reports referred to in section 2.2 are being prepared by the DoE. The following are skeletons that are ready for use currently:

Document	*File name of latest version*
APP	PFMA Annual Performance Plan 050419.doc

The skeletons should be used as follows:

- Go through the text in red, which provides instructions and guidelines relating to the completion of the document. It is important that the requirements in the red text be complied with. However, the red text is not necessarily an indication of the order in which issues should be dealt with.
- Where a spreadsheet tool supports the preparation of tables, prepare the statistics in the spreadsheet tool, and then transfer the data to the Word document. See tips relating to table preparation below.
- Where the characters "<>" appear in the document, fill in the appropriate text, e.g. the name of the province.
- Where "??" appears, replace this with the appropriate text, e.g. the year for which particular data applies.
- The finished document should have all the red text deleted.
- The finished document should be named as in the following example (for the APP for Eastern Cape completed 27 August 2006):

Tips for table preparation are:

- When copying and pasting from an Excel spreadsheet tool to a Word table, do the following: Transfer regular blocks of cells one at a time. Do not try to copy and paste entire tables where there are merged heading cells. When pasting into Word, what seems to work best is menu path Edit > Paste Special and then the option Formatted Text (RTF).

- An effective way of stopping a table from ever being split across two pages is the following: Select the table (e.g. via the menu path Table > Select > Table), then go to menu path Format > Paragraph, then select the tab Line and Page Breaks, then make sure that "Keep with next" is ticked. If you have problems, it could be because the space immediately after the table also has "Keep with next". The solution is to select just the empty line after the table, and to go to Format > Paragraph, and to make sure that "Keep with next" is *not* ticked.

3.4 ISCED compliance and conversions

3.5 Description of data sources

General household survey

Production and scope

This data source is an annual household survey, specifically designed to measure various aspects of the living circumstances of South African households. The data is released annually by Statistics South Africa (Stats SA) together with meta data and a statistical release which details some of the major findings from the survey. It collects information from about 30 000 households on a variety of subjects including education, health, the labour market, births, access to services and facilities, the environment and quality of life. Each year, additional questions may either be added to existing sections or alternatively, new sections may be introduced on a different topic altogether. In total, the questionnaire contained 176 questions in 2004, 162 in 2003 and 156 in 2002. The GHS consists of four databases of which the person database provides the information on education that is applicable for the purposes of education planning. Approximately 100 000 persons are surveyed.

Why this data source

This survey provides the most up to date information about education variables amongst a representative sample of households. Although the GHS is not conducted with each and every household in South Africa like the Census, the households that are selected in the GHS represent the total South African population, within a reasonable error margin. Although the census is conducted with more households than the household survey (and would therefore have a smaller error margin), the datedness of the census data makes it inappropriate to use for the purposes of annual education planning.

Using the data

As indicated in the indicators matrix of section Data to be provided by DoE, the data for the relevant indicators (E.g. Net enrolment ratio) are processed at the national Department of Education.

The database is made available on CD Rom by Stats SA. The data is captured in the form of a flat text file that should be imported into a database or statistical analysis package since the data set comprises of approximately 100,000 lines of data. Variable names, variable properties and start and end coordinates are provided in the Metadata to assist with the setup of the data file. Note that to make the data usable, it is necessary to type the details of each variable to be used, using the information in the metadata document. This is usually done in a small file creation programme, for instance the text wizard definition file in SPSS. It can be very time-consuming to do this for all variables, so it may be preferable to extract only the variables that the analyst will need in order to save time. There are many variables (e.g. health and welfare information) in the person table of the GHS which are clearly of no interest to the education analyst.

Weights for the persons are provided as a variable towards the end of the persons database. A copy of the full questionnaire with the final coding categories is provided together with some background information about the survey methodology and changes from previous questionnaires.

It is advisable that a statistical analysis software package (e.g. SAS, SPSS or STATA) is used to work with this data set since weighting needs to be applied and confidence intervals need to be checked for each individual Province.

Sampling issues

The sample is representative of the total South African population roughly within an error margin of about 1%. For smaller subsets of the sample the error might increase somewhat. E.g. when looking at the number of learners aged 7 – 15 years old that are in school the data from the 2003 GHS indicates a percentage of 97.37%. The sampling error for this variable is estimated to be approximately 0.06% which means that the population percentage is most likely somewhere between 97.31% and 97.43%. For the Northern Cape, where the smallest sample was drawn, the survey results yield 96.35% with a slightly larger error margin of about 0.31%. It is likely that the actual enrolment rate in the Northern Cape is somewhere between 97.31% and 97.43%. Although the sampling error is important to take into account, the results are deemed to be adequately accurate for education planning purposes.

Since the survey used households as the sampling unit, it is necessary to apply weighting to the results of individual persons. Stats SA have already established the weights which is included as a variable in the dataset. The metadata contains full details of how the weights were calculated. When analysing the data, it is important to ensure that the weighting is taken into account – both when percentages and absolute numbers are computed. It is necessary to use a statistical analysis programme such as SPSS™ or STATA™ to produce any results.

Readers are cautioned to be careful when comparing averages and percentages of different provinces with one another or when results over different years are compared for the same province. Different variances apply to different groups which are oversimplified when results are presented as averages and percentages. A test of statistical significance is required to conclusively indicate that an average in one

province is actually higher than the average of another province. For example, if the average number of years schooling in Province A is found to be 8.3 and in Province B it is found to be 8.9, these results might actually be very similar and it would not be accurate to claim that Province B is performing "better" than Province A.

Annual survey of schools

Production and scope

The Annual School Survey collects information from all schools about learners, staff, activities and facilities. The data is collected annually by the DoE's Education Management Information Systems.

Why this data source

The Annual School Survey is the most up to date source of data about schools. Although there are concerns about the completeness and quality of the data, the EMIS directorate aims to improve its data collection activities annually.

Using the data

The database is made available to each provincial EMIS department. The data is captured in multiple tables within a Microsoft Access database platform. An excel file containing all the variable names and short description of these as well as the EMIS ASS questionnaire is the only available Metadata.

In order to extract information from the database a person requires skill in manipulating the data in Microsoft Access.

3.6 Data sampling concepts

The following issues impact how the performance measures are calculated and interpreted.

What is a sample?

When social scientists attempt to measure a characteristic of a group of people, they seldom have the opportunity to measure that characteristic in every member of the group. Instead they measure that characteristic (or parameter as it is sometimes referred to) in some members of the group that are considered representative of the group as a whole. They then generalise the results found in this smaller group to the larger group. In social research the large group is known as *the population* and the smaller group representing the population is known as *the sample*.

For example, if a researcher wants to determine the percentage children of school going age that attend school (the nett enrolment rate), she/he does not set out to ask every South African child of school going age if they are in school. Instead she/he selects a representative group and poses the question to them. She then takes those results and assumes that they reflect the results for all learners of school going age in South Africa. The *population* is all South African learners of school going age the *sample* consists of the group she selected to represent that population.

What is a good sample?

A good sample accurately reflects the diversity of the population it represents. No population is homogenous. In other words, no population consists of individuals that are exactly alike. In our example - the population of South African children of school going age - we have people of different genders, population groups, levels of affluence, and of course, school attendance, to name just a few variables. A good sample will reflect this diversity. Why is this important?

Let's consider our example once again. If the researcher attempts to determine which percentage of South African children of school going age attend school, and selects a sample of individuals living in and around Pretoria and Johannesburg, can the findings be generalised with confidence? Probably not. It is reasonable to assume that the net enrolment rate may differ substantially between urban areas and rural areas. Specifically, you are more likely to find a greater net enrolment rate in urban areas. So in this case the *sample* results would not be an accurate measure of the levels of education for the *population*.

Sampling error

The preceding example illustrates the biggest challenge inherent in sampling – limiting sampling error. What is meant by the term *sampling error*? Simply this: because you are not measuring every member of a population, your results will only ever be approximately correct. Whenever a sample is used there will always be some degree of error in results. This "degree of error" is known as sampling error.

Usually the two sampling principles most relevant to ensuring representativity of a sample, and limiting sampling error, are sample size and random selection.

Random selection and variants

When every member of a population has an equal chance of being selected for a sample we say the selection process is random. By selecting members of a population at random for inclusion in a sample, all potentially confounding variables (i.e. variables that may lead to systematic errors in results) should be accounted for. In reference to our example – if the researcher were to select a random sample of children of school going age, then the proportion of urban vs. rural individuals in the sample should reflect the proportion of urban vs. rural individuals in the population. Consequently any differences in net enrolment rates for urban and rural areas are accounted for and any potential error is eliminated.

Unfortunately random selection is not always possible, and occasionally not desirable. When this is the case, researchers selecting a sample attempt to deliberately account for all the potential confounding variables. In our example the researcher will try to ensure that important population differences in gender, population group, affluence etc. are proportionately reflected in the sample. Instead of relying on random selection to eliminate potential error, she/he does so through more deliberate efforts.

Sample size

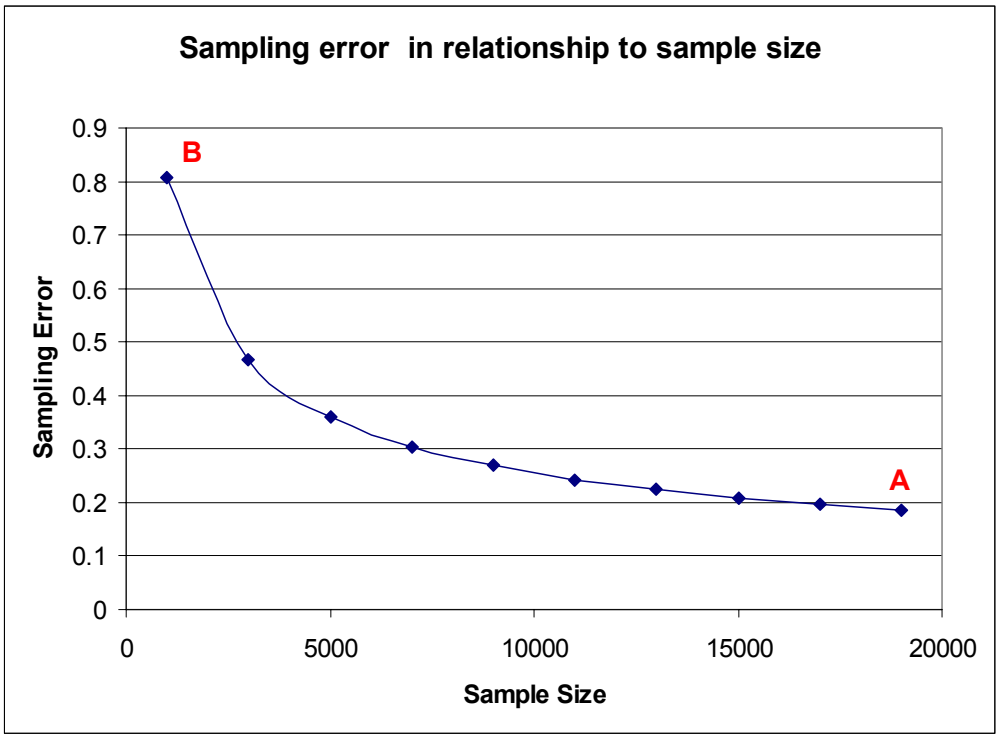
In terms of sample size, it is generally assumed that the larger the sample size, the smaller the sampling error. Note that this relationship is not linear. The graph below illustrates how the sampling error decreases as sample size increases. The graph illustrates the relationship between sample size and sampling error as a statistical principle. In other words the relationship shown here is applicable to all surveys, not just the General Household Survey.

In the General Household Survey, the sample included 18,657 children of school going age for the whole of South Africa. This sample was intended to represent approximately 8,242,044 children of school going age in the total South African population. Because it is a sample there will be some degree of error in the results. However the sampling error in this case approaches a very respectable 0.2% (See point A in the graph above) because of the large sample size.

What does this mean? Well, if we are reporting values for a parameter - e.g. the number of children that are in school - and find that the result for the sample is 97.5%, it means that the same parameter in the population – the number of children that are in school - will range between 97.3% (97.5%-0.2%) and 97.7% (97.5%+0.2%). Note that if the sample included only 1000 people that the sampling error would have increased to 0.8%.

More detail on how sampling errors are calculated is provided later.

Figure 5: The relationship between sampling error and sample size



Calculating the sampling error

As must be clear by now, sampling error is inevitable in social research but also acceptable if kept within certain limits. Usually we are satisfied with sample results

that allow us to generalise to the population with a 95% degree of confidence (in other words, 95% of the likely variations due to sampling error would be accounted for).

When reporting percentages

Most of the PMs that draw from sample data require PEDs to report on the incidence / percentage of something. E.g. on PM001 we are interested in the percentage of children aged 7 – 14 that attend school in a specific Province. For Eastern Cape it is found to be 96.24% in the sample with an estimated standard error of 0.168 (i.e. 96.24% plus or minus 0.168). Therefore the 95% confidence interval (CI95%) for Eastern Cape is 96.07 and 96.40. The following example illustrates how to estimate this sampling error and confidence interval. Note that CI in this example stands for the confidence interval within which we are at least 95% sure that the population value will fall. If we want to be 99% sure, then the confidence interval will be wider in order to take into account major variations.

The formula for calculating a sampling error that will cover 95% of all deviations are:

$$SE_{95\%} = \frac{\sqrt{\frac{(PY)(PN)}{S}}}{1.96} * 100$$

Where:

- $SE_{95\%}$ is the sampling error at the 95% level of confidence
- PY and PN represent the proportion of people responding to each of the categories (Yes, and Not Yes) in a question with a yes/no (dichotomous) answer. E.g. "Does this person attend school or any other educational institution?"
- S represents the number of people of the age and geographic distribution of interest (i.e. 7 to 14 year olds in Eastern Cape) in the sample
- 1.96 is a standard value from a statistical table (the so called Z table) that provides the proportion of area under the normal curve where 95% of all values are likely to be included. If you were interested in computing the 99% confidence interval you could substitute this value with 2.58 but for the purposes of provincial planning, we recommend that the 95%CI value is used.

From the 2003 GHS, the following values for the Eastern Cape sampling error were applicable:

- PY (The proportion of 7 – 14 year olds that said they were in school) = 0.965
- PN (The proportion of 7 – 14 year olds that said they were not in school) = 0.035
- S (The number of 7 – 14 year olds included in the Eastern Cape sample) = 3110

And therefore the formula yields the following result:

$$SE_{95\%} = \frac{\sqrt{\frac{(.965)(.035)}{3110}}}{1.96} * 100$$

$$SE_{95\%} = 0.168$$

With a percentage of 96.24% of 7 – 14 year olds in the Eastern Cape GHS sample that goes to school, one can then assume with 95% certainty that the population percentage (the percentage of all 7 – 14 year old learners in the Eastern Cape) will lie somewhere within the confidence interval of 96.07% and 96.40% - in other words 96.24% minus 0.168 and 96.24% plus 0.168.

Although it is quite easy to manually compute the sampling error when a percentage value is being reported, it is worthwhile to note that most statistical software packages can work out the sampling error with the click of a button.

When reporting averages

Although most PMs that draw from sample data require PEDs to report the percentage incidence of something (% of school going age learners that attend school), there is also one PM that requires the reporting of an average: PM005 reports the average highest school grade attained by adults in the population. For Eastern Cape the average highest school grade attained is 7.401 (in other words somewhere between grade 7 and grade 8) with an estimated sampling error of 0.043 (i.e. 7.4 plus or minus 0.043). Therefore the 95% confidence interval for this PM in the Eastern Cape is 7.358 and 7.444. The following example illustrates how to estimate this sampling error and confidence interval. Note that CI in this example stands for the confidence interval within which we are at least 95% sure that the population value will fall.

The formula for calculating the sampling error of a mean that will cover 95% of all deviations are:

$$SE_{95\%} = \frac{SD}{\sqrt{N}}$$

Where:

$SE_{95\%}$ is the sampling error at the 95% level of confidence

N represents the number of people of the age and geographic distribution of interest (i.e. 7 to 14 year olds in Eastern Cape) in the sample

SD is the standard deviation of the mean (which is an important statistical property that tells one how close to the average the other values are distributed) that could be easily calculated using the relevant function in Excel or any other statistical software package. The formula for computing the SD is:

$$SD = \sqrt{\frac{\sum (X - \overline{X})^2}{N - 1}}$$

Where:

SD is the standard deviation of a mean or average

$(X - \overline{X})$ is the highest qualification value for each person minus the average for the whole sample.

N is the number of people in the sample.

From the 2003 GHS, the following values for the Eastern Cape sampling error were applicable:

N (The number of people in the Eastern Cape sample aged 19 and older) = 7816

SD = 3.757207

And therefore the formula yields the following result:

$$SE_{95\%} = \frac{3.757207}{\sqrt{7816}} \qquad SE_{95\%} = 0.043$$

With an average highest school grade of 7.4, one can then assume with 95% certainty that the population average (the highest average grade attained by people aged 19 and older in the Eastern Cape) will lie somewhere within the confidence interval of 7.358 and 7.444 - in other words 7.4 minus 0.043 and 7.4 plus 0.043.

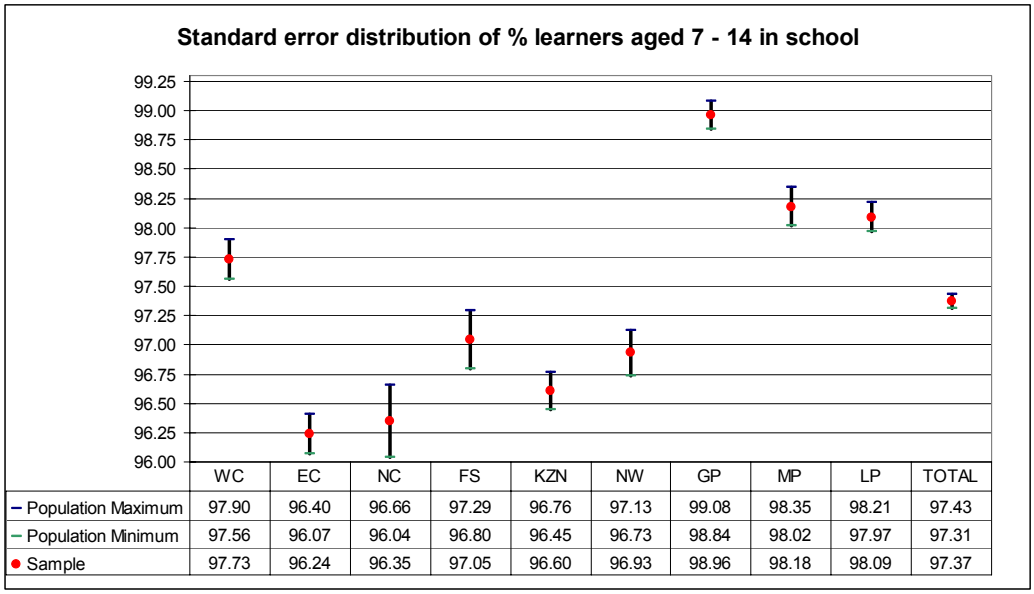
Although it is possible to manually compute the sampling error of a mean, it is worthwhile to note that most statistical software packages can work out the sampling error with the click of a button.

Statistical significance

It is not always correct to manually compare averages and percentages when one is interested in differences between different years' or different provinces' results. Percentages and averages are single figures that do not always adequately describe the variance on a specific variable. One needs to be convinced that a "statistically significant" difference is observed between two values before one can say one value is "better" or "poorer" than the other.

In the figure below, the Net Enrolment Rate (percentage of learners aged 7 - 14 enrolled in school) for each province is mapped together with a short line that indicates the confidence interval. Note that the % reported for EC is 96.24% (ranging between 96.4% and 96.07%), for NC it is 96.35% (ranging between 96.04% and 96.66%) and for KZN it is 96.60% (ranging between 96.45% and 96.76%). It would be incorrect to state that the NC result is "better" than the EC result or "poorer" than the KZN result, because the confidence interval of NC overlaps with the confidence intervals of KZN and EC and the actual means might be anywhere within the confidence intervals. It is clear however, that the confidence intervals for EC and KZN do not overlap at all and it would be accurate to say that there is a "statistically significant difference" between the Net Enrollment Rates of Eastern Cape and KwaZulu Natal.

Figure 6: Standard error distribution of % learners aged 7 – 14 in school



	WC	EC	NC	FS	KZN	NW	GP	MP	LP	TOTAL
Population Maximum	97.90	96.40	96.66	97.29	96.76	97.13	99.08	98.35	98.21	97.43
Population Minimum	97.56	96.07	96.04	96.80	96.45	96.73	98.84	98.02	97.97	97.31
Sample	97.73	96.24	96.35	97.05	96.60	96.93	98.96	98.18	98.09	97.37

In order to make confident statements of comparison about averages (i.e. PM005 the average highest school grade obtained by the adult population in a province), one would need to conduct tests of statistical significance (e.g. a t-test) using an applicable software package. These tests take into account the variance attributable to the sampling error and the normal variance around a mean. Although these tests fall outside the scope of this manual, a person with some skills in statistical analysis could produce results (In a statistical analysis package or even in a spreadsheet application such as excel) that will allow adequate comparison of means between and within groups.

Weighting

Earlier we mentioned that one of the properties that influence representivity of sample results is whether the people all have the same probability of selection. If one had a complete list of all people in South Africa and a specific address for each one of them, you could have randomly selected people from this list and visited each one of them at their address. In this scenario each person has an equal chance to be included in the sample because you have the relevant details about them.

Unfortunately, researchers rarely have this kind of list and the costs would be very high if you had to visit each of the people you selected at their own address – You would probably end up speaking to one person per address only. To save time and money researchers rather speak to all people in a specific household that they select, but then all of the individuals in the population no longer have the same likelihood to be selected because this is impacted by which households are selected.

The probability of selection is even further complicated if one considers that researcher also don't have a list with all households in South Africa to randomly select from. To get around this problem they use information about neighbourhoods and geographic locations to identify areas in which they will select households. When a survey uses neighbourhoods or households as a sampling unit, there is little control over the number of persons that will be included in the survey. One household in area A could have 5 people in it and the household next door might have 3 people in it. In order to ensure that the individuals within households (and households within neighbourhoods or household sampling units) are not disproportionately represented in relationship to known population parameters, weighting is applied.

Different weighting procedures can be used to correct for the probability of selection. The weighting procedure is usually selected by statisticians involved with the sampling in the survey. The weight to apply to each individual is usually captured as a variable somewhere in the dataset. Although it is beyond the scope of this manual to explain different ways of weighting it is important to consider that weighting will affect the percentages and absolute numbers produced.

The following table indicates how the percentage of 7 – 14 year olds that indicate they attend school in the General Household Survey differ when weighting is applied and when it is not applied.

Percentage of 7 - 14 year olds in school			
Province		**Unweighted**	**Weighted**
WC	Count	1,666	712,139
	%	**98.1**	**97.7**
EC	Count	3,002	1,367,786
	%	**96.5**	**96.2**
NC	Count	818	123,635
	%	**96.8**	**96.4**
FS	Count	1,301	424,122
	%	**96.7**	**97.0**
KZN	Count	3,279	1,747,870
	%	**96.6**	**96.6**
NW	Count	1,761	643,437
	%	**97.2**	**96.9**
GP	Count	1,675	1,195,830
	%	**99.1**	**99.0**
MP	Count	1,754	602,687
	%	**98.1**	**98.2**
LP	Count	2,924	1,207,891
	%	**98.3**	**98.1**
Total	Count	18,180	8,025,397
	%	**97.4**	**97.4**

When analysing the data, it is important to ensure that the weighting is taken into account – both when percentages, averages and absolute numbers are computed. It is necessary to use a statistical analysis programme such as SPSS™ or STATA™ to produce any results.

3.7 Useful resources on the Internet

3.7.1 Guidelines and manuals

The following documents are useful for understanding indicators and data quality issues.

- OECD (2002). *Guidelines for the use of indicators in country performance assessment*. [Internet] Brussels. Available from <http://www.oecd.org/dataoecd/51/36/33670318.pdf> [Accessed 20 February 2005].

- UNESCO (1997). *International standard classification of education: ISCED 1997*. [Internet] Paris. Available from <http://www.uis.unesco.org/TEMPLATE/pdf/isced/ISCED_A.pdf> [Accessed 17 January 2005].

- UNESCO (2003). *Education indicators: Technical guidelines*. [Internet] Paris. Available from <http://www.uis.unesco.org> [Accessed 17 January 2005].

- World Bank. (2003) *A framework for assessing the quality of education statistics*. Washington. Available from

<http://www.uis.unesco.org/TEMPLATE/pdf/SCB/DQAF%20for%20education%20statistics.pdf> [Accessed 20 February 2005].

- The millennium development goals can be accessed on the website http://www.unmillenniumproject.org

3.7.2 Examples of education investment analyses

The following documents contains some particularly useful examples of education planning analyses. If they have moved on the Internet, e-copies can be obtained from the Budget Office at DoE.

- OECD (2002). *Education policy analysis*. [Internet] Bonn. Available from <http://www1.oecd.org/publications> [Accessed 13 November 2003].

- UNESCO (2002). *Financing education – investments and returns: Analysis of the World Education Indicators*. [Internet] Paris. Available from <http://www1.oecd.org/publications/e-book/9603011E.PDF> [Accessed 17 January 2005].

- UNESCO (2004). *Global education digest 2004: Comparing education statistics across the world*. [Internet] Paris. Available from <http://www.uis.unesco.org/TEMPLATE/pdf/ged/2004/GED2004_EN.pdf> [Accessed 25 February 2005].

3.8 National quality assurance criteria

To do: The criteria by which the DoE and National Treasury will evaluate quality of reports and plans produced by PEDs will be inserted here.