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GOVERNMENT NOTICE

DEPARTMENT OF BASIC EDUCATION**No. 515****11 June 2010****NATIONAL EDUCATION POLICY ACT OF 1996****THE NATIONAL POLICY FOR AN EQUITABLE PROVISION OF AN ENABLING SCHOOL PHYSICAL TEACHING AND LEARNING ENVIRONMENT**

I, Angie Motshekga, Minister of Basic Education after consultation with the Council of Education Ministers and in terms of section 3(4) of the National Education Policy Act, 1996 (Act No 27 of 1996), hereby publish the National Policy for An Equitable Provision of an Enabling School Physical Teaching and Learning Environment, as set out in the schedule.


Copies of the documents are available from the Department of Basic Education:

123 Schoeman Street

PRETORIA

0001

The document may also be obtained at: www.education.gov.za


ANGIE MOTSHEKGA, MP
MINISTER OF BASIC EDUCATION

DATE: 18 May 2010



**THE NATIONAL POLICY FOR AN EQUITABLE
PROVISION OF AN ENABLING SCHOOL PHYSICAL
TEACHING AND LEARNING ENVIRONMENT**

May 2010

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Foreword by the Minister of Basic Education

School infrastructure remains a critical issue on the social agenda in South Africa for a number of reasons. In the first place, infrastructure differentials are so large in South Africa and some of the infrastructure available so inadequate that it is inconceivable that it DBEs not impact on learner performance. Secondly, the highly unequal access to quality facilities remains critical in the light of our Constitution and the Bill of Rights which demand equity and equality.

In addressing these, the DBE published the first school register of needs (SRN) in order to identify the gap and magnitude of the problem. SRN revealed inequalities and inadequacies in the teaching and learning environments of most our learners. SRN was updated in 2006 and now called National Education Infrastructure Management System (NEIMS). Since then Government increased the efforts to close the gap in resource provision, by substantially increasing resource allocation for school infrastructure and basic services.

There is evidence on progress that Government has made in the provisioning of infrastructure to school. However there are still persisting challenges as inequalities are still there, where some schools are still without basic service, laboratories, computers and inadequate classrooms. The progress in infrastructure provision has taken place without specific national or provincial policies, norms or strategies to guide and support the development of the physical teaching and learning environment. The absence of clear national policy and norms has led to

- Constraints on planning as there was little consensus on targets or precise specification of targets.
- A lack of guidance to provinces and school districts on what is required and what the best approaches would be.
- Difficulty in assessing the current environment as adequate or inadequate against clear benchmarks which had been pre-set
- Difficulty to find robust evidence for the assessment of technical efficiency and substantive responsiveness of the current environment

The goal of this policy then, is to guide the provision of an enabling physical teaching and learning environments that are sustainable, equitable for all learners in South Africa and to ensure that future investments are aligned with that definition. This policy framework for school infrastructure is critical to provide a basis for planning and implementation. It also responds to persisting challenges in the provision of an enabling physical teaching and learning environment. It builds on successes of the past decade and endeavours to address persisting gaps. It takes the future development to the next level that should enable South Africa to equitable and efficiently provide high quality learning environments, culturally sensitive values and development-related education, training and skills development experiences for *all* its learners. The policy seeks to transform the environment into an enabler for effective implementation of sector policies, effective curricula delivery, and effective teaching and learning processes.

This work would not have been successful without the financial support from the Norwegian Trust Fund managed by the World Bank and the overall strategic guidance and direction from the Council of Education Ministers.



MRS. A MOTSHEKGA, MP
MINISTER OF BASIC EDUCATION

ABBREVIATIONS AND ACRONYMS

ABET	Adult Basic Education and Training
BEE	Black Economic Empowerment
BMP	Basic minimum package
CEM	Council of Education Ministers
CPAR	Country Procurement Assessment Review
DME	Department of Minerals and Energy
DBE	Department of Basic Education
DPW	Department of Public Works
DWAF	Department of Water Affairs and Forestry
ECD	Early Childhood Development
EFMS	Education Facility Management System
ELSEN	Education for Learners with Special Education Needs
ETSDS	Education, Training and Skills Development System
FET	Further Education and Training
GDP	Gross Domestic Product
GET	General Education and Training
GIS	Geographic Information System
HEDCOM	Heads of Department Committee
ICB	International Competitive Bidding
ICTs	Information Communication Technologies
IDIP	Infrastructure Development Improvement Programme
JPSA	Joint Initiative for Priority Skills Acquisition
IPFA	Institute for Public Finance and Auditing
LPPP	Leveraging Private Purchasing Power
NEIMS	National Education Infrastructure Management System
NCS	National Curriculum Statement
NSNP	National School Nutrition Program
OBE	Outcome Based Education
PPWD	Provincial Public Works Departments
PEDs	Provincial Education Departments
PFMA	Public Finance Management Act
PPPFA	Preferential Procurement Policy Framework Act
PPP	Public Private Partnerships
PRPs	Physical Resource Planners
SASA	South African Schools Act
SCM	Supply Chain Management
SCMO	Supply Chain Management Office
SGBs	School Governing Bodies
SRN	School Register of Needs
TA	Technical Assistance

EXECUTIVE SUMMARY

- 1.1. ***Historical background:*** In 1994, South Africa's democratically elected government inherited one of the world's most inequitable education and training systems. Unequal education opportunities were fostered mainly through unequal distribution of education resource inputs that are known to negatively impact on learning. Learning outcomes were understandably acutely inequitable. The physical teaching and learning environment—school infrastructure and basic services—has historically been one of the most visible indicators of inequitable resource inputs. The majority of our learners were taught in decrepit and unsafe buildings; their schools had no electricity, safe water, sanitation, telephones or co-curricula facilities and equipment.
- 1.2. ***Significance of the physical teaching and learning environment:*** Yet as recent studies show, there is a link between the physical environment learners are taught, and teaching and learning effectiveness, as well as learning outcomes. Poor learning environments have been found to contribute to learner irregular attendance and dropping out of school, teacher absenteeism and the teacher and learners' ability to engage in the teaching and learning process. The physical appearance of school buildings are shown to influence learner achievement and teacher attitude toward school. Extreme thermal conditions of the environment are found to increase annoyance and reduce attention span and learner mental efficiency, increase the rate of learner errors, increase teacher fatigue and the deterioration of work patterns, and affect learning achievement. Good lighting improves learners' ability to perceive visual stimuli and their ability to concentrate on instructions. A colourful environment is found to improve learners' attitudes and behaviour, attention span, learner and teacher mood, feelings about school and reduces absenteeism. Good acoustics improves learner hearing and concentration, especially when considering the reality that at any one time, 15 percent of learners in an average classroom suffer some hearing impairment that is either genetically based, noise-induced or caused by infections. Outdoor facilities and activities have been found to improve learner formal and informal learning systems, social development, team work, and school-community relationships.
- 1.3. Inequalities in the teaching and learning environment may therefore frustrate core sector policies to improve education quality, equity of inputs and of outcomes.
- 1.4. ***Prior efforts to track provision:*** Cognisant of this reality, the Department of Basic Education (DBE) set off to systematically document the extent and nature of provision of the physical teaching and learning environments that we inherited in 1994. Two years after the transition to freedom, DBE published the first ever school register of needs (SRN) that revealed stark inequalities and inadequacies in the teaching and learning environments of most our learners. Since then, the SRN had been updated in 2000 and then again in 2006. In-between these surveys, the DBE doubled efforts to close the gap in resource provision. These efforts were buttressed by the government's readiness to substantially increase resource allocations for school infrastructure and basic services from R 352 million in 1995/1996 to

R500,000.00 to R 9.7 billion in 2012/2013. They were also enabled by the joint DBE and National Treasury interventions to strengthen institutional delivery capacities.

- 1.5. ***Progress and persisting challenges:*** Progress is evident, albeit inadequate and uneven. Inadequacies are stark in some aspects like the provision of school libraries where nearly 80 percent of schools are still without science laboratories, lack of computers for teaching and learning in 68 percent of our schools, and inadequate classrooms leading to overcrowding in nearly a quarter of our schools.¹
- 1.6. Consultations on leading to the development of this policy highlighted that a typical South African school still does not provide a physical environment that enables effective implementation of core sector policies, such as the progressive curricula, co-curricula activities and the level of quality, equity, efficiency, relevance, and values.
- 1.7. Inadequate though current provision may be, the situation has phenomenally improved over the first decade and half of freedom. However, these improvements have progressed without a clear policy framework. The risk is that more resources may be invested without a clear definition of what constitutes an enabling physical teaching and learning environment in South Africa's schools of the future, without a clear benchmarking of progress toward the attainment of that environment, and without a clear monitoring of the impact of that environment on the attainment of our core sector policy targets and outcomes.
- 1.8. ***Policy rationale, goal and objectives:*** The development of this policy is therefore prompted by a dual need to more clearly and systematically define what constitutes an enabling physical teaching and learning environment for all South Africa's learners, and to ensure that future investments are aligned with that definition.
- 1.9. An overarching goal of this policy is to guide the provision of an enabling physical teaching and learning environment equitably for *all* learners in South Africa.
- 1.10. Specific objectives are to facilitate the attainment of:
 - broad-based access to education, training and skills development opportunities,
 - equity and redress of inherited inequities in provision and associated outcomes,
 - quality and effectiveness of education, training and skills development,
 - functional relevance / responsiveness of the physical teaching and learning environment,
 - efficiency of provision, management and usage of elements of the environment, and
 - national values (democracy, excellence, accountability, social cohesion, diversity, innovation and creativity, critical thinking and judgment, cooperation, etc.)
- 1.11. ***Process followed in developing this policy:*** The process of articulating this policy has been consultative and collaborative. The DBE was supported by the World Bank

which worked very closely with South Africa's experts at the central level and in provinces. The DBE also worked in close consultation with other key departments such as Treasury and Public Works. Consultants included curricula experts at the national and provincial levels, physical planners at all levels, and the Council of Education Ministers (CEM). The latter accepted this policy as robust and sound enough to guide future and equitable provision of an enabling physical teaching and learning environment.

- 1.12. ***Conceptualisation of an enabling physical teaching and learning environment:*** In the process of articulating this policy, the DBE recognised that the current conceptualisation of the physical teaching and learning environment as pertaining to school infrastructure and basic services was too narrow to facilitate and even reinforce the level of education and training that reflects the needs of our economy. Over the past year, the DBE therefore elaborated its concept of the physical teaching and learning environment to include: school infrastructure, basic services, furniture, equipment, co-curricula facilities, books, computer rooms/lab and instructional materials.
- 1.13. ***Key areas requiring strategic and operational policy direction:*** The consultative and collaborative process also identified 6 principle areas as required for a clear national strategic policy direction and 2 principle areas for a clear national operational policy direction. In that order, these are:
- the authority for setting National Norms and Standards that should guide the adequacy, equity and fit-for-purpose of the physical teaching and learning environment,
 - a system for setting priorities for provision, and in a manner that facilitates the actualisation of key sector policies—which are: quality, equity, relevance, efficiency, and values,
 - a system of planning to address identified priorities,
 - a contextually adaptable system for standardising architectural designs that respond to core sector policies, teaching and learning requirements, set priorities for provision, and that ensures effective cost management and cost control,
 - a system for timely and cost-effective management and maintenance of assets created as part of an enabling physical teaching and learning environment that optimises usage and longevity,
 - diversification of funding sources that is financially feasible, sustainable, and that eases the burden of provision on the government,
 - a system for ensuring the adequacy of capacity to deliver the required elements of the environment, and

- a system for effective management of procurement procedures required to assure time and resource efficiency, transparency, cost management, and quality of services and outputs.

1.14. **Policy statements:** The 6 strategic and 2 operational policy statements are summarised as follows:

Policy Statement # 1: Nationally established norms and standards for an enabling environment

1.14.1. *Effective from 2010/2011 financial year, norms and standards for the physical teaching and learning environment will be set at the national level by the Department of Basic Education. National Norms and Standards will set and express in terms of minimum and optimum provision. Along this continuum, norms and standards for basic safety, minimum functionality, optimum functionality and enrichment will be explicitly defined at a national level by the Department of Basic Education. The DBE will also set clear target dates by which a set proportion of schools will meet each level of enablement in its environment. The DBE will also set a clear date by which all South Africa schools will meet norms and standards for optimum functionality.*

1.14.2. *National Norms and Standards will be developed and will be fully adopted by the end of 2010/2011 financial year.*

1.14.3. *Provinces will adapt National Norms and Standards to their contexts without prejudice to set minimum. Effective from 2011/2012 financial year, all provinces will have aligned their plans and budgets in accordance with these norms and standards. By the end of 2010 to 2014 strategic plan period all schools will be applying all the necessary process norms and standards required for basic safety and minimum functionality.*

1.14.4. *As need arises, national and/or sector strategic development priorities will be translated into enrichment norms and standards as defined by the Department of Education. These norms will be defined in response to current national and sector development imperatives. Such dictates may be the need to ramp up certain outputs such as in the Dinaledi project. It may be to fast track reaching international benchmarks required to be competitive. It may be 'catching up with international developments' such as the mooted 'schools of the future'. It may be to create regenerative capacity that can later be applied to ramp up equitable quality such as in the creation of pockets of excellence. It may be to ride a global market tide as in the case where a certain skills mix is required within a short period of time. It may be the need to level the playing field where the floor is too low relative to the ceiling and needs to be raised within short time spans, etc.*

1.14.5. *The National Department of Basic Education will execute the meeting of enrichment norms and standards.*

1.14.6. *Access to and benefits from enrichment norms will be equitable. In real terms, if going beyond the optimum functionality norms and standards is creating justified inequality, the justification has to be explicit, transparent, and owned by a reasonable threshold of stakeholders. Such strategic inequalities should therefore be “mandated inequalities”. The process and decision on who has the mandate or how the mandate is created will be transparent. Such a mandate will vest in the Office of the Minister of Basic Education—because it is responsible for overall sector development.*

1.14.7. *Because even “mandated inequalities” may violate the national and sector “norm of equal opportunity” the distribution of opportunities to schools and/ or programmes that go beyond effectiveness criteria will itself be explicitly and transparently equitable. Criteria will therefore be equity based. Proposed principal criteria are aptitude, exceptional achievement, and redress.*

Policy Statement # 2: Systematised establishment and prioritisation of infrastructure needs

1.14.8. *During 2010/2011 financial year—criteria and procedures for the identification and prioritisation of the teaching and learning environment needs will be nationally standardised by the Department of Basic Education and guidelines prepared. Provinces must adapt national procedures to reflect their unique contexts. Provincial adaptations must not lower the national minimum criteria, but may only pertain to enrichment but not diminution. Irrespective of the source—individual school funds, donor funding, public funds—all resources available to Provinces have to first be applied toward meeting nationally set priority needs. Except where nationally set priorities are fully met, Provinces must not apply funds for enrichment purposes.*

Policy Statement # 3: Planned development of an enabling environment

1.14.9. *Effective from 2010/2011 financial year, the DBE will adopt the planned development approach to the physical teaching and learning environment. A national strategic plan will be developed in line with critical sector and thematic policy priorities. The national plan will be prepared on a long term—20 years—medium term—5 years—and short term basis—1 year. It will set national and provincial strategic objectives and targets to be achieved within each plan period. The strategic plan will provide the substantive base for investment planning. Irrespective of the source, the financing of the physical teaching and learning environment will be provided within the framework of the strategic plan.*

1.14.10. *In addition to the strategic plan, the development of the physical environment will be guided by mandatory recurrent planning instruments vis annual implementation plans, procurement plans, financial and disbursement plans. The national department will also develop mandatory medium term and*

short term results frameworks that will guide the monitoring and evaluation of the development of the physical environment.

1.14.11. *Consistent with the national approach provinces will adopt the planned development approach to the physical teaching and learning environment. Provincial plans will be set within the same terms as the national plan. They will reflect strategic objectives and targets as set in the national plan. Likewise financial provision will be provided only within the framework of the provincial plan.*

1.14.12. *Provinces will also develop all plans that are mandatory at the national level. Their provision programme may not be funded before clearance of mandatory plans by a set authority.*

Policy Statement # 4: Standardised architectural designs

1.14.13. *During 2010-2014 strategic plan period, all new construction and extensions will follow prototype space norms and designs. To the extent possible, major rehabilitation will integrate key elements of the standard designs—e.g., accessibility. The National Department of Basic Education will produce a menu of prototype designs for the space norms to match the typology of schools. The designs will be a product of a clear analysis of key education functions and activities to be carried out within proposed physical spaces. Design prototypes will respond to core activities and facilitate them. Standard designs will also be guided by core sector policies such as physical access and substantive relevance. Provinces may adapt standard designs to specific geographical contexts and to specific construction sites. Such adaptations will not digress from the essence of the design, and especially not reduce responsiveness to policy priorities and sector needs.*

1.14.14. *Standardised menu of prototypes will be used to create cost maps and to guide and where necessary, control construction costs. An allowable margin of variance from the cost maps should be determined and circulated. Any new construction that goes beyond allowable variance will be subject to prior review and subsequent clearance by the head of a provincial department—. The clearance system will be embedded in the procurement process and become part of the criteria for bid evaluation.*

Policy Statement # 5: Management and Maintenance

1.14.15. *By the end of 2010/2011 financial year the DBE will have developed a national policy on educational immovable assets that will be in line with GIAMA. Minimum parameters of this policy will include: standardised acquisition of assets; standardised and current register of assets, current information and data base; standardised recording and tracking of the value of assets; insurance of the assets; efficient usage, timely and adequate maintenance, rehabilitation, and disposal. The policy will inter alia entail norms and standards for preventive and corrective maintenance as well as*

replacements. It will entail the allocation of responsibilities for certain types of maintenance in terms of financing, execution and quality assurance. This policy will be under implementation by provinces and schools during 2010-2014 strategic plan period.

Policy Statement # 6: Diversification of funding sources

- 1.14.16. *By the end of 2010-2014 strategic plan period, the DBE will be actively engaging in an approach to apply alternative funding mechanisms. All financial mechanism must be in line with section 24 of the Constitution and will be coordinated by National Treasury. Among the range of financing mechanisms that will be considered and mapped to appropriate contexts will be: private public partnerships (PPPs), the leveraging of private purchasing power (LPPP); and the use of international donors. Provinces will be engaged in supporting this approach.*

Policy Statement # 7: Demonstrated delivery capacity

- 1.14.17. *During the 2010-2014 strategic plan period, the DBE will intensify the devolution of responsibility, authority and accountability for the provision of school infrastructure to the lowest feasible level in the education system which is the school. The definition of functions to be devolved will be explicitly and uniformly specified based on best practices for effective delivery and not on current capacities of levels of devolution. A capacity development programme will be developed and implemented to ensure a rollout of the development processes in accordance with the plan.*
- 1.14.18. *The DBE will integrate all infrastructure delivery functions which are currently carried out by different agencies and unify responsibilities and accountabilities. All infrastructure provision operations managed and coordinated under Treasury, other than the actual provision of funds, should be moved to the DBE. The planning and management of infrastructure operations at provincial level involving the Provincial Public Works Departments (PPWDs) and PEDs should be vested with the PEDs.*
- 1.14.19. *A comprehensive capacity development programme should be developed and immediately implemented to enables the DBE and PEDs to effectively and efficiently deliver key elements of the teaching and learning environment.*
- 1.14.20. *The DBE should retain full authority to appoint an agent to augment their delivery capacity for key elements of the teaching and learning environment. Such an agent should be under the full supervision of the DBE.*
- 1.14.21. *For a specific purpose, the DBE may create a unit centrally to manage the delivery of key elements of the teaching and learning environment. Such a unit should report to the National Department of Basic Education. The unit will*

be dissolved at the end of the specific purpose period and full responsibility for delivery will revert to the National and Provincial Departments of Education.

Policy Statement # 8: Systematised procurement management and procedures for the sector

- 1.14.22. *Effective from 2010-2014 strategic plan period, the procurement of all elements of the physical teaching and learning environment will comply with the standardised sector-specific procurement procedures. These procedures will be developed by the DBE, in compliance with the overall national procurement policy and procedures. All provinces will comply with set sector-specific procedures.*
- 1.14.23. *Effective from 2010-2014 strategic plan period,—responsibility and accountability for the actual execution of procurement procedures will be with PEDs and not with a multiplicity of agencies as is currently the case.*
- 1.14.24. *Effective from 2010-2014 strategic plan period authority for procurement execution will be devolved to the lowest appropriate operational level.*
- 1.15. This rest of this document presents the country and sector context of this proposed policy, its rationale and strategic direction, objectives, 6 strategic policy statements, and 2 core operational policy statements essential for effective implementation of the 6 strategic policy statements.
- 1.16. For each policy statement, key challenges that it seeks to address are presented, prior and ongoing efforts to address these challenges, persisting challenges that provide the justification for that specific policy statement, policy actions required to enable the implementation of that specific policy statement, expected benefits of each policy statement, expected costs, key risks and strategies that have to be put in place to mitigate those risks.

CHAPTER 1: HISTORICAL CONTEXT

Introduction

- 1.1. The 1994 transition to freedom came with as much opportunities as it did with challenges. Among key challenges that we inherited was an Education, Training and Skills Development System (ETSDS) that was designed to provide the majority non-white population with inferior education opportunities and experiences. One of the forceful tools the apartheid regime used to foster unequal education opportunities was the unequal and unjust distribution of fiscal resources. For instance, prior to independence in 1994, per capita spending on a white child was 350 percent more than on a black child.¹ For the majority of learners, this skewed financing translated into acute shortage of resource inputs that are known to impact teaching and learning. Examples include inappropriate and ill-balanced curricula, unqualified and ill-prepared teachers, ill-prepared school managers, inappropriately used school inspection, limited books and instructional materials, overcrowded and unsuitable teaching spaces to name a few. As a consequence of inferior education opportunities, the majority of learners realised much lower learning outcomes than their well-resourced and well-catered-for counterparts.
- 1.2. This situation could not continue under a democratically elected government that espoused the norm of equal opportunity for *all*. Equality of education opportunity was, and is still deemed critical, not only because it is one of the constitutional rights, but also because education is the single most powerful determinant of other life opportunities, including the opportunity for education itself! For that reason, equity and redress rank high amongst principles that permeate our sector policies, strategies and programs.
- 1.3. During the first decade of freedom, the Department of Basic Education (DBE) focused mainly on the development of overall sector policy, legal, institutional and financing frameworks that give effect to the norm of equal opportunity. Significant progress has been registered. A unitary ETSDS was established from the fragmented apartheid system; access was broadened at all levels of the ETSDS; provision of resource inputs has become more equitable; and progress toward equity of learning outcomes is evident. By 2006, per capita spending on a white child had declined to 22 percent more than on a black child.²
- 1.4. With the basic frameworks in place, during the second decade of freedom, the focus of attention turned to the development of specific sub-sector, thematic and topical policies. As a result, there are now policies on early childhood development and pre-primary education, ABET and inclusive education, to name a few.
- 1.5. This policy addresses one of the thematic areas that have historically been one of the most visible indicators of unequal resource provision: *The physical teaching and learning environment*.

- 1.6. For purposes of this policy, *the physical teaching and learning environment* is broadly conceived as comprising school infrastructure; basic services; furniture; equipment, books, teaching and learning materials, and co-curricula facilities and equipment. School infrastructure is broadly conceived to include the physical teaching and learning spaces (classrooms, laboratories, computer laboratories; workshops and other specialised teaching rooms); spaces that support teaching and learning (media rooms, multi-purpose resource centres, multi-purpose school halls, gymnasias, libraries, counselling centres, health centres); sport facilities; school administrative facilities; facilities for school nutrition and feeding programmes; and teacher housing etc. Basic services include clean and safe water, electricity, access roads, sanitation, telephone and/or other communication systems.

Systematic tracking of the state of provision

- 1.7. From the onset, it was recognised that accurate and reliable data is critical for tracking progress toward *equitable provision of an enabling physical teaching and learning environment*. In 1996, two years after the democratic transition, the DBE launched the first ever school register of needs (SRN) survey. The survey covered the conditions of school buildings, and available facilities in all the 26,734 ordinary schools. The 1996 SRN provided an invaluable baseline database on the provision of school infrastructure and basic services. Since then, the data was updated and elaborated on in 2000 and again in 2006.
- 1.8. The 2000 SRN covered 27,148 ordinary public and independent schools. It went further than the 1996 survey to include 3000 institutions previously not covered and 390 schools for learners with special needs.
- 1.9. In addition to public schools, the 2006 survey (referred to as the National Education Infrastructure Management System [NEIMS]) covered public Early Childhood Development (ECD) centres, Adult Basic Education and Training (ABET) centres, centres for the Education of Learners with Special Needs (LSEN) and education offices operated by the DBE.
- 1.10. Other than broadening coverage of the series of SRNs, the DBE has continued to refine the methodology and scope of the surveys. Reflective of its label, the NEIMS adopted a systemic approach that differs from the first two surveys. Its invaluable additions include standardised assessment instruments; a web-based database from which data on the overall national education asset register can be imported; and a GIS-based infrastructure management system that will become an integral part of the overall facilities management system. It also took a more specific approach to assessing the condition of each element of the infrastructure. This specificity allows for better estimates of the investment required to address the poor condition of infrastructure, estimates of condition backlog values and estimates of replacement values.
- 1.11. The NEIMS also included information and functions that enable timely and sustained monitoring of the state of provision. These functions allow for immediate remedial action which was not possible based only on the 1996 and the 2000 surveys. For instance, the 2000 survey showed a substantial increase in the construction of classrooms and the delivery of basic services since 1996. However, it also

documented significant deterioration in the conditions of schools owing to poor maintenance. With the functions provided in the 2006 survey, such deterioration might have been remedied on time; had the same functions been available earlier.

- 1.12. Collectively, the three surveys provide for the tracking of improvements in *equitable provision of an enabling physical teaching and learning environment* over the decade (1996 to 2006). Table 1 presents highlights of progress made; albeit inadequate and uneven.

Table 1: Trends in Provisioning School Infrastructure and Basic Services

Year	Total ³ Ordinary Schools Surveyed	Schools without Electricity	Schools without water on site or near	Schools without toilets on site	Schools without telephone	Schools without computers for teaching & learning	Schools without library	Schools without labs	Classrooms with 45 or more learners
1996	26734	59.2%	34.1%	12.2%	60.6%	68.6%	82.1%	75.6%	56.6%
2000	27148	44.6%	28.8%	9.2%	35.5%	67.0%	81.2%	75.9%	42.2%
2006	25095	17.1%	12.6%	6.1%	9.1%	68.0%	79.6%	60.5%	24.3%

- 1.13. The progress in Table 1 is attributable to a combination of factors; including overall economic growth, government readiness to significantly increase budget allocations for school infrastructure, and institutional capacity strengthening. The budget allocation for school infrastructure increased from R 352 million (0.06% of the GDP) in 1995/1996 to R 4.95 billion (0.24% of the GDP) in 2008/2009. This constituted an increase from about 1.67 percent of the total capital expenditure in the sector in 1995 to 5.22 percent in 2008/2009.
- 1.14. Increases in budget allocations were not always met with commensurate absorptive capacity at the provincial level. In response, the DBE strengthened institutional delivery capacity by establishing the Physical Planning Directorate in 2001, and established designated positions of Physical Resource Planners (PRPs) in PEDs. In 2005, the National Treasury established the Infrastructure Development Improvement Project (IDIP) to augment efforts of the DBE and further strengthen the delivery and absorptive capacity of the PEDs.

Rationale for policy and strategic direction

- 1.15. The progress as outlined above was realised without specific national or provincial policies or strategies to guide and support the development of the physical teaching and learning environment. Because of unclear policy and strategic guidance, objectives and targets, it has been difficult to assess the current environment as adequate or inadequate against clear benchmarks which had been pre-set. It has also been difficult to find robust evidence against which an assessment of the technical efficiency and substantive responsiveness of the current environment can be made. This has made it difficult to clearly and operationally define what constitutes an

enabling physical teaching and learning environment for South Africa's future schools.

- 1.16. Evidence collected during the process of developing this policy suggests that the environment is neither technically efficient nor substantively responsive. In addition, current provision of the physical teaching and learning environment remains uneven and inequitable. A current average school in South Africa does not provide a physical environment that facilitates effective teaching and learning; effective curricula delivery, effective implementation of key sector policies and programmes, or promotes adequate learner health and safety. It is even more doubtful if the environment provided by our schools can efficiently enable South Africa to take its ETSDS to the level of quality, equity, efficiency, cultural and value sensitivity, and development responsiveness of countries of comparable economic stature, let alone facilitate the transition to such levels.
- 1.17. While during the past decade enormous progress was recorded toward improving provision and redressing inequalities, substantial effort is still required to transform South Africa's schools into enabling physical teaching and learning environments.
- 1.18. The NEIMS showed that in 2006, a substantial proportion of schools could not be classified as providing an enabling physical teaching and learning environment. Nearly 15 percent of learners were taught in environments that expose them to danger and to potential health hazards. About a quarter of classrooms were overcrowded. Intolerably high proportions of schools lacked facilities that are critical to teaching and learning such as libraries, science laboratories, computers and other ICTs. Data on the adequacy of books and instructional materials is at best scanty. About 62 percent of schools had no arrangements for sewage disposal. Nearly 80 percent of schools had more than 50 learners per toilet. Of the schools that reportedly had a source of safe water, 56 percent were served by the municipality of which nearly 17 percent experienced unreliable water supplies. Unreliable supply of electricity was also common among schools that reportedly had it. While school construction had increased, maintenance had deteriorated. In 1996, 11 003 schools were reportedly in excellent to good condition. By 2000, the number had dropped to 5 078. In 2006, 26 percent of schools were in either poor or very poor condition.
- 1.19. Not surprisingly, persisting inadequacies in the physical teaching and learning environment have gained significant media and political attention, even prominently featuring in the Presidential State of the Nation Address of February 2005.
- 1.20. In response, the 2008/2012 strategic plan of the System Planning and Monitoring branch of the DBE identifies the development of norms and standards as well as the Basic Minimum Package (BMP) for the provision of school infrastructure as a first priority policy issue. It also identifies the development of "physical resources for quality education especially school infrastructure" as a second strategic priority action. One of the key actions under this strategic priority is the development of a comprehensive investment plan based on agreed Norms and Standards.
- 1.21. This policy responds to persisting challenges in the provision of an enabling physical teaching and learning environment. It builds on successes of the past decade and endeavours to address persisting gaps. It takes the future development to the next level that should enable South Africa to equitable and efficiently provide high quality

learning environments, culturally sensitive values and development-related education, training and skills development experiences for *all* its learners. The policy seeks to transform the environment into an enabler for effective implementation of sector policies, effective curricula delivery, and effective teaching and learning processes.

CHAPTER 2: SECTOR CONTEXT: ENABLING THE IMPLEMENTATION OF SECTOR POLICIES AND PROGRAMS

Introduction

- 2.1. The first decade of freedom witnessed the development of a rich base of sector-wide policies, legal and financing frameworks, and institutional development. Curricula and pedagogy have been improved, as well as learner and system evaluation mechanisms. A key feature of these policies, programmes and legal instruments is their interdependence on effective implementation and desired impact. Like all other aspects of the system, the physical teaching and learning environment may facilitate or impede the implementation and desired impact of sector policies, programmes and legal instruments. In this particular case, the current environment, if not urgently attended to, may often play an impeding rather than facilitating role.
- 2.2. This policy is expected to facilitate the implementation of existing policies, programmes and legal instruments in two principal ways: Firstly, it addresses elements of the physical teaching and learning environment that constrain effective policy and programme implementation. Secondly, its strategic direction may set new parameters for existing policies and programmes. From this perspective, this policy may improve the realism and/or feasibility of existing policies, their currently set strategic targets and the scale and nature of programmes. This may particularly be the case where the demands of existing policies on the teaching and learning environment cannot be met- cannot be met within a specified time frame, may not be met at the level of set targets, or are dissonant with non-negotiable tenets of this policy. This latter situation may induce or cause a revision and/or reconsideration of existing policies, programmes and/or their strategic targets. The reverse, it should be noted, may also be the case.

Responding to the demands of existing sector policies and programs

- 2.3. One of the key rationales for this policy is to guide future provision of the environment and to ensure that it adequately responds to the demands of, amongst others, the following key policies, programmes and legal instruments.
- 2.4. **The Constitution:** The Constitution, Section 24 (a) everyone has a right to an environment that is not harmful to their health or well being. The Constitution furthermore, specifically Section 29 (1) of the Bill of Rights, states that everyone has the right to basic education, including adult basic education and to further education which the state, through reasonable measures, must make progressively available and accessible. The constitution provides for compulsory primary education. However, in real terms, the Bill of Rights obligates the government to take appropriate/reasonable measures to make secondary and further education progressively accessible to *all*. Section 9 (2, 3, 4, and 5) of the Constitution further obligates the state to attain equality of opportunity and to be non-discriminatory.
- 2.5. **The South Africa Schools Act:** Section 3 of the 1996 South Africa Schools Act (SASA) provides for a compulsory general education phase for ages 7 to 15 or grade 1 to 9. Provincial MECs are responsible for providing school places for every child of eligible age for the compulsory GET. Other than legal instruments, South Africa's

skills shortage and the overall development imperative suggest that quality senior secondary education should be accessible to *all* eligible learners.

- 2.6. ***Learner Admission Policy: Section 6 (b) of SASA 15 of 1996*** also guarantees that “...no person without just cause may prevent a learner who is subject to compulsory attendance from attending a school.”

2.6.1. ***Implication for the teaching and learning environment:*** The above three legal instruments demand that education, training and skills development opportunities should be extended to *all* South African learners in an equitable and non-discriminatory manner. The currently wide disparities in the provision of the physical teaching and learning environment violate the rights of citizens enshrined in these instruments in two principal ways: Firstly, by affecting physical access to education and training. This may be the case where schools are not within walking distance from learners and where there are no alternative means of access such as hostel accommodation or learner transportation. It may also be the case where learners with physical challenges do not have real access to facilities. Secondly, by affecting the quality of instruction learners are exposed to, thus leading to unequal opportunity. This may be the case where intolerable differentials in the environment—classrooms, special teaching rooms, laboratories, co-curricula facilities, libraries, books and instructional materials, equipment etc.—lead to substantial differences in learning outcomes. Equity in the provision of an enabling physical teaching and learning environment is therefore a constitutional right and not just a desirable state.

- 2.6.2. From a political and social angle the conditions under which some learners are taught are simply unacceptable. It is reminiscent of the old regime and socially and politically intolerable.

Early Childhood Development and Pre-Primary Education: The government has adopted a pro-poor expansion of universal access to quality ECD. The strategic objectives of DBE is to expand access to quality of ECD opportunities especially for poor communities, with a special focus on Grade R.

- 2.7. Meeting the demands and targets of this policy has enormous implications for the provision of infrastructure and/or efficient use of existing infrastructure. There are also significant implications for the provision of furniture, equipment, books and instructional materials.

Inclusive education: White Paper No. 6: Special Needs Education, Building an Inclusive Education and Training System underpins the development of an inclusive education and training system. Guidelines for the implementation of this policy have also been articulated. In its strategic plan, the DBE aims to improve access and quality education to learners who experience barriers to learning, by providing adequate spaces and resources to support teaching and learning.

- 2.8. ***In addition to the inclusive education policy, the National Building Regulations of 1986 stipulates that all new buildings*** must be accessible to all. Designated full service schools that were built before this date should therefore be adapted to comply with this regulation. All new schools should take accessibility into account. More than just the infrastructure, some furniture may need adjustment to allow for easy movement and seating.

- 2.8.1. **Implication for the teaching and learning environment:** Chapter 1 points to the level of effort required to give full effect to the admissions policy, inclusive education policy and to the national building regulation. At the same time, the feasibility of the set policy targets may need to be reconsidered as their cost implications on the physical environment and their demand on implementation capacity are evident.
- 2.9. **E-Education, reading, mathematics and science education:** The Joint Initiative for Priority Skills Acquisition (JIPSA) and the current sector strategy prioritize mathematics, science, and reading. The provision of libraries and library stocks will be substantially enhanced across all schools.
- 2.10. As part of the JIPSA projects, the first implementation phase of the mathematics science and technology improvement strategy (referred to as Dinaledi Schools) was launched in 2001. The project is expected to improve learner learning outcomes in mathematics, science and technology significantly. It mostly caters for disadvantaged learners with demonstrable potential in these subject areas. Relative to the rest of our schools, these schools are adequately resourced to become centres of excellence in these subjects. Their impact is beginning to show.

The 2004 White Paper on e-Education sets out to transform teaching and learning through ICTs. The overall strategic objective is to support curriculum implementation through the use of ICT.

- 2.10.1. **Implication for the teaching and learning environment:** A significant improvement of the reading scores of our learners will require substantial improvements not only to the provision of textbooks but also to the provision of supplementary materials through well stocked libraries and/or innovative mechanisms of bringing library stocks to learners. Yet as shown in Table 1, a substantial numbers of schools do not have libraries. While it can be noted that it may not be feasible for all schools to have libraries, the provision of adequate library stocks in hard and/or electronic form to *all* learners is an equity imperative.
- 2.10.2. Improvements to learner learning outcomes in science have implications for the provision of science laboratories or at bare minimum, equipment that allows for the simulation of science experiments for learners' virtual experience. Yet, Table 1 shows that 60 percent of schools do not have science laboratories and/or suitable substitutes. On top of all this, the expansion of Dinaledi schools demands heavy investment in laboratories, equipment, instructional materials and consumable.
- 2.10.3. Effective implementation of the e-education policy implies substantial investments in suitable infrastructure for ICTs and in appropriate equipment. There are also implications for the provision of such basic services as reliable and affordable power supplies and telecommunication systems. As presented in Table 1, nearly 70 percent of schools do not have computers for teaching and learning purposes currently. A significant number of schools rely on cell phones for their daily communication. Connectivity is not readily possible for a fair number of schools. Where available, sustained affordability of connectivity is in even greater doubt. Power supply is still unreliable, not only

for schools but even for the whole country. These constraints point to improvements required in the environment if this e-education policy is to be implemented effectively, its targets to be attained and its impact to be realised in an equitable manner.

- 2.11. ***Curricula and pedagogical reforms such as the OBE and NCS:*** The introduction of OBE and learner-centred pedagogy imply the need for more generous classroom spaces and furniture that allow for flexible seating and grouping arrangements. They also imply better equipped classrooms and special teaching areas, more flexible multi-purpose learning areas, learning resource centres, library stocks, ICTs and more enriched teaching and learning environments.

2.11.1. ***Implication for the teaching and learning environment:*** Effective implementation of these reforms suggests dramatic changes to the physical teaching and learning environment. As shown in Table 1, a little more than a quarter of classrooms are overcrowded, there is shortage of laboratories and other relevant equipment, library stocks remain scarce, even for schools with library buildings. Without adaptations to norms and standards for provision of these elements, there is a clear risk of failure to attain the intended benefits of such curricula and pedagogical reforms.

- 2.12. ***Sport in education:*** The priority accorded to sport education has implications for school sites, sport facilities and equipment. The same will apply for the emerging emphasis on art and music. A large proportion of schools does not have adequate grounds for learners to play safely, let alone sports facilities and equipment. This priority programme will not realise its intended impact if adjustments are not made to norms for the size and appropriateness of school sites. In particular, it is difficult to see how farm schools and small rural schools could prioritise sport if no serious adjustments and/or innovations are made.

National school nutrition program (NSNP): In 2004, the DBE took over responsibility for this programme from the Department of Health. Adopting a pro-poor sequence, the DBE seeks to ensure that Learners in poorest primary schools and secondary schools have access to nutritious meal. In addition DBE plans to promote sustainable food production in these schools to develop skills.

- 2.13. ***These programmes require the availability*** of reliable drinking and cooking water supplies, cooking facilities, equipment, utensils and food supplies. During inclement weather, some rural and farm schools have to use classrooms as kitchens. Perennially, these schools use classrooms as storage space for food supplies and cooking utensils. This inappropriate use of physical spaces has a double burden of insufficiently serving the purpose for which they are used while displacing learners from the much needed teaching and learning space. The NSNP is aligned with the Integrated Food Security Programme that promotes the establishment of food gardens in schools and communities. This implies adequate and suitable grounds to provide space for these gardens. Yet there are no clear norms on the size and suitability of school sites.

- 2.14. ***Guidance and counselling and pastoral care:*** In the face of HIV/AIDS and the accompanying physical and psychosocial stress on learners and educators; school health and counselling programmes are critical necessities. These factors necessitate holistic counselling and pastoral care. As part of the improvement of counselling and pastoral care, learners across the province will be reached through the harmonised

peer education care and support programme. **Complex career choices and rapidly changing** labour market needs impel sophisticated career counselling services for learners. These services require physical spaces and facilities that provide for privacy of service. Currently, most schools do not have such spaces. This may constrain learner uptake of services, especially where their privacy is at stake.

- 2.15. **Learner health and safety:** As noted, learners are exposed to environments that pose both a safety and health hazards. Ablution facilities are particularly inadequate. Nearly 80 percent of schools have more than 50 learners per toilet. For the girl child in particular, such constraints may adversely impact on attendance and consequently in schooling and learning outcomes. Inadequate provision may translate into denying these children substantive access to ETSD, and thus violating their constitutional rights.
- 2.16. DBE aims to increase knowledge and awareness of health promoting behaviours, reduce the number of new HIV infections in schools and to facilitate early identification and treatment of health barrier to learning.
- 2.17. In terms of safety, the NEIMS showed that by 2006, only 5.5 percent of assessed schools had a functional gate and fence. Even fewer had burglar bars and/or alarm system. This is in times of serious concerns for learner safety in some areas, and whilst 32 percent of schools show some evidence of vandalism, and whilst 585 schools were identified as presenting high levels of crime and violence. To make these schools and indeed all others a safe learning environment, DBE will have to strengthen the implementation of school safety programmes and integrate school safety as a key component of school management.
- 2.18. **Strengthening school-community relationships:** The current sector strategy prioritises the need to strengthen school-community relationships. This is a dual relationship in the sense that communities are critical contributors to the development of their children's schools, education processes and outcomes. At the same time, communities are also benefit from their schools. There is still a challenge of providing adequate facilities in schools that communities could use. It is equally challenging to design schools in a manner that are culturally inviting and appropriate for community usage. The new norms and standards will address this area.
- 2.19. **Schools of the future:** Although not yet in policy documents, some provinces are beginning to explore the concept of schools of the future. These may remain under the rubric of "special programmes". If adopted, they will demand a serious re-thinking of the provision of the physical teaching and learning environment. As South Africa's intends to advance the teaching of science and technology, such global developments need further investigation for possible inclusion in future policies.
- 2.20. **Overall:** Other than the specific demands of each policy, an added challenge is that, at present, the DBE do not have a robust framework and tools for prioritisation of these policies and their targets. It has been noted that debate on policy and on trade-offs among the above policy targets needs strengthening. As such, the set of sector policies does not provide an obvious guidance for the prioritisation of elements of the teaching and learning environment. Within a context of scarce resources, it would be difficult to avoid trade-offs. A specific policy and strategic guidance on the physical teaching and learning environment is therefore required to not only respond to the demands of

the above sector policies, programmes and legal instruments, but to motivate them into some form of prioritisation. As part of this proposed policy, a simulation model that can help us cost our policy choices, assess the feasibility of our policy targets and provide us different workable scenarios for reaching priority targets has been developed.

Conclusion

This policy and the accompanying norms and standards provide a framework within which the issues addressed in this chapter can be addressed.

CHAPTER 3: STRATEGIC POLICY DIRECTION AND OBJECTIVES

Introduction

- 3.1. The strategic direction of this policy is derived from policy tenets that permeate national and sector policies because specific policies, programmes and targets reviewed in Chapter 3 are bound to change over time. These canons are what all national, sector, sub-sector and thematic policies endeavour to contribute towards their actualization. They constitute the strategic direction and core objectives of each policy. These enduring policy tenets include the improvement of:
- 3.1.1. broad-based access;
 - 3.1.2. equity and redress;
 - 3.1.3. quality and effectiveness;
 - 3.1.4. functional relevance / responsiveness;
 - 3.1.5. efficiency; and
 - 3.1.6. national values (democracy, excellence, accountability, social cohesion, diversity, innovation and creativity, critical thinking and judgment, cooperation, etc.)

Policy objectives

- 3.2. The following indicates how these canons provide a conceptual framework and strategic objectives for this policy:

Facilitating broad-based access, equity and redress

- 3.3. ***The first strategic objective of this policy is to facilitate broad-based and equitable access to education, training and skills development opportunities.*** The ease or lack thereof of physical access to teaching and learning spaces is still the dominant determinant of equity of access. Proximity to or distance from schools is a strong determinant of whether or not children will enrol, enrol at the right age, consistently attend, stay engaged, or eventually survive or drop out of school. The design of school infrastructure determines whether learners with special needs will enrol and effectively participate in school. The availability or lack of certain physical facilities—e.g., ablution—is a strong determinant of gender patterns of participation and completion rates in education, training and skills development. Children who enrol in incomplete schools are more likely to drop out of school between cycles than those that are enrolled in schools that provide a full cycle. *For these reasons the first proposed policy area relates to the definition of National Norms and Standards for equitable access.* Among others the National Norms and Standards will include a specification of adequate distance from school. The policy under this area sharpens the current zoning or catchment area system by defining a clear norm for reasonable distance from school. Learners, especially in rural and farms areas reported walking diversely varied distances with the worst reported as 34 kilometres per day to and from school.
- 3.4. Where ease of physical access to schools is not financially feasible, proposed alternatives include the provision of transport, provision of hostels, and/or the provisioning of special schools.
- 3.5. The provisioning of physical teaching and learning space in the form of classrooms, teaching rooms and schools remains the most dominant and traditional tool for broadening access to education, training and skills development. The pace with which systems can construct teaching and learning spaces is essentially the pace with which they can broaden access to ETSD services. These spaces guarantee nominal access without which substantive access is impossible.

For this reason, the second policy identified in the next chapter which requires a policy direction at a national level is the systematisation of the process for identifying priorities for provision that guarantees nominal access as the basic entry point to substantive access. Policy statements under this area address the need to have a clear, systematic and systemic approach to prioritising the provision of key elements of the physical teaching and learning environment. A clear policy on this area will reduce destructive and inequitable variations in provision.

3.6. The third and less used alternative mode of bringing education, training and skills development services close to learners is the use of ICTs. Except in higher education, South Africa is yet to exploit the full potential of this alternative. Binding constraints include availability and affordability of sources of power. Affordability not only of the hardware but also of connectivity. With other forms of ICTs (e.g. radio and television) there are still issues of affordability, maintenance and upkeep with recurrent costs. As outlined above, our current strategic plan sets bold targets for mainstreaming ICTs in the curricula, pedagogy and management of the education, training and skills development system.

Improving quality and effectiveness in an equitable manner inclusive of past inequities

3.7. ***The second objective is to improve the quality and effectiveness of teaching and learning and thus improve learning outcomes.*** Physical or nominal access is an essential but inadequate condition for quality education, training and skills development. Full provision of the right to education requires

Box 1: The impact of physical environments on teaching and learning effectiveness

Poor learning environments contribute to:

- irregular attendance and drop out
- teacher absenteeism, attrition and turnover
- a poor state of learners and a poor ability of teachers to engage them in learning

The age /physical appearance of school buildings influences:

- learner achievement
- the attitudes of teachers' toward the schools

Extreme thermal conditions of the environment:

- affect academic achievement
- affect learner ability to grasp instruction
- temperatures above 27 degrees Celsius tend to produce harmful physiological effects on learners
- increase annoyance and reduce attention span and mental efficiency of all, especially in situations where learners are performing tasks calling for quick recognition and response
- increase errors in performing tasks
- increase teacher fatigue and deterioration of work patterns

Good lighting contributes significantly to:

- the aesthetics and psychological character of the learning space
- learners' ability to perceive visual stimuli and to learn
- learner ability to concentrate on instruction

Colour influences:

- learner attitudes, behaviours and learning
- learners' attention span as well as the teacher's sense of time
- learner and teacher mood
- absenteeism and feelings about school

Good acoustics improves:

- Learner ease of hearing and concentration especially when considering that at any one time, 15 percent of learners in an average classroom suffer a hearing problem that is either genetically based, noise-induced, or caused by infection

Outdoor activities contribute to:

- formal and informal learning systems
- physical education
- social development
- team work
- school community relationships
-

substantive access. Contrary to common wisdom from the first generation of production function analysis, recent analyses show that the physical environment affects teaching, learner engagement, learning and potential learning outcomes (see Box 1). In contrast to earlier findings that school factors are weak determinants of learner learning outcomes, follow up and more sophisticated analyses suggest that earlier findings could have been a function of the degree of variance in predictor variables. Developed country systems that have managed to reduce variation in school factors, render these factors less powerful predictors of learner learning. For developing countries however, where there is still a wide variation in provision, school factors tend to be more powerful predictors.

- 3.8. As noted, progress has been made in improving provision, but the technical adequacy and the substantive responsiveness of this provision remains doubtful. Potential substantive inadequacy partly arises from the exclusion of educators from processes that determine specifications of teaching and learning environments. Because inequalities and unwarranted variations in the physical environment may risk equitable provision of quality education, the following chapter highlights both process and participation in the determining norms and standards for the teaching and learning environment as a matter that requires standardisation /formalisation through policy. Such processes should take the elements in Box 1 into consideration.

Enhancing relevance / responsiveness

- 3.9. ***The third objective is to enhance the responsiveness of the physical teaching and learning environment to core demands of the education sector:*** As the dictum goes, “form follows function”. It is recognized that physical environments should respond to the core business that is to be transacted in those environments. In Chapter 3, it was argued that these environments should facilitate effective implementation of sector policies, programs and legal instruments. It is recognised that in this specific case, the main business to be transacted in the environment in question is teaching and learning. It has also been noted that sources consulted suggest that this environment does not adequately take into account teaching and learning processes. In the past, educators have not been adequately consulted in the design of teaching spaces. The views of key users—teachers, learners, administrators, communities—were not rigorously taken into account. Designs did not adequately reflect the complex needs of learners including private spaces such as for counselling, health consultations, and sick bays. Despite South Africa’s complex curricula, the environment has hitherto lacked a systematic way of responding to curricula or their pedagogical imperatives. At best, the relevance or responsiveness of the system to core functions of schools and to primary users has been weak.

Increasing efficient utilisation and management of facilities

- 3.10. ***The fourth objective is to increase efficiency in the utilisation and management of elements of the physical teaching and learning environment.*** As noted in the foregoing introduction, the government is allocating a substantial amount of resources to the improvement of the teaching and learning environment. Physical facilities—buildings, equipment and furniture, claim the highest proportion of our sector development budget. Efficient and/or inefficient use of these facilities translates into huge resource wastage. Poor management and maintenance of these facilities also accrue very high costs and translate into unaffordable resource wastage. The NEIMS

suggests that poor management and maintenance of infrastructure may have trapped the country into perpetual and unaffordable refurbishing and even replacements of school infrastructure. It has been noted that the current lack of life-cycle management of assets, equipment, and instructional materials leads to further loss of much needed resources. As outlined above, the negative impact of poor physical teaching and learning environment on education quality affects internal efficiency of the education, training and skills development system. Poor quality or ineffective teaching and learning environment generate high failure, repetition, and drop-out rates and the resultant inefficiencies in the use of education resources.

Promoting espoused values

- 3.11. *The fifth objective is to promote key values that are to be promoted through the sector:* The design and usage of key elements of the current physical teaching and learning environment does not adequately give effect to South Africa's cherished values, and especially values espoused by the sector. The diversity of South Africans could be better reflected in architectural designs. The very creation of the designs could better reflect democratic values through inclusive consultation. The stimulation of well designed and used environment could lead to innovation. School community relationship and open communication between the two could yet be other values expressed through designs. The way schools are designed, and policies on the usage of school facilities could cement or hamper effective school/community relationships. As such, promoting espoused values is another key objective of this policy.

CHAPTER 4: POLICY AREAS AND POLICY STATEMENTS

Introduction

- 4.1. Against the historical context guided by national and sector demands and the above outlined policy objectives, 6 areas requiring a clear strategic policy direction and 2 areas that require clear and consistent operational policies—hereafter referred to as policy areas, were identified. Strategic policy areas are those that require national and high level decisions to regularise them and to align them with national and sector policy priorities. They are fundamental for the attainment of policy objectives outlined in Chapter 3. From a cost-benefit point of view, strategic areas are those whose adoption will bring about significant benefits in terms of the actualisation of national and sector policies. Strategic policy areas also have a high efficiency factor in the sense that they contribute to the attainment of several national and sector policies.
- 4.2. In contrast, operational areas are of a lower level but are still significant enough to warrant regularisation at a national level. They are enablers of the first 6 strategic areas. They have been highlighted because, if not addressed, will frustrate the effective realisation of strategic policy areas.
- 4.3. The 8 policy areas requiring strategic and operational policies are detailed in this chapter and in their sequential order as follows:
- 4.3.1. *authority for setting norms and standards for an enabling environment*
 - 4.3.2. *authority and the process of setting priority needs for the environment*
 - 4.3.3. *the extent of planning for the provision of an enabling environment*
 - 4.3.4. *whether or not to standardise architectural designs*
 - 4.3.5. *the nature and system for asset management and maintenance*
 - 4.3.6. *sources of funding for the environment*
 - 4.3.7. *assuring effective capacity to deliver elements of the environment*
 - 4.3.8. *sector procurement procedures and procurement management*
- 4.4. For each of the above areas, the document presents the actual statement of the policy which will hereafter guide the provision of an enabling teaching and learning environment. The document also identifies specific policy actions required to actualise each of the 8 policy statements. These actions are what will make it possible to implement each and every policy as stated. Expected benefits of each stated policy are also clearly delineated in the policy. Key risks associated with each policy and strategies to mitigate risks that may abort and/or frustrate expected policy benefits are also identified.
- 4.5. While each policy area has specific benefits, a prime benefit of the national policy is guidance of future provision of an enabling physical teaching and learning environment, ensuring equity of provision and effective facilitation of national and sector policies, strategies and programmes. This national policy is also not intended to stifle constructive or enriching variations in provision, but rather to regularise and systematise variations and inconsistencies that risk the attainment of policy objectives presented in Chapter 4.
- 4.6. The realisation of expected policy benefits will also depend on the ability to effectively implement the national policy detailed below. It is for this reason that concerns for

delivery capacity has been elevated to a level of a national operational policy (policy areas # 7). At the same time, this policy will guide long-term strategic plans and a series of implementable medium term programs. Medium term programs will provide a base for strengthening implementation support tools such as: implementation plans; procurement plans; financial and disbursement plans, national and international benchmarking; monitoring and evaluation; and impact evaluation.

- 4.7. The realisation of expected policy benefits will also demand a more efficient use of resources. To that end, close attention has been paid to cost control measures, especially within the second operational policy (Policy Area # 8). Beyond efficiency measures, effective implementation of this policy may require additional resources. To this end, policy area # 6 highlights the need to diversify funding sources and to ease the burden on government. This policy therefore guides the development of a 20-year investment plan for an enabling physical teaching and learning environment presented as a different output.
- 4.8. This national policy is therefore setting in motion not only a future strategic policy direction, but also practical steps to ensure effective policy implementation and the monitoring of its expected development impact.

Policy areas and policy statements

Policy Area # 1: Nationally established norms and standards for an enabling environment

Background

- 4.9. In Chapter 2 it was noted that the degree to which schools can equitably deliver expected educational outcomes, partly depends on the adequacy of inputs they are provided with and processes they use to mobilise those inputs into results. As presented in Chapter 3, this policy is guided by expert knowledge on the link between certain education resource inputs and processes on the one hand, and learning outcomes on the other. Specifically, current knowledge guides the link between core elements of the physical teaching and learning environment, and effective teaching, effective learning and learning outcomes. This knowledge is what guides the selection of a minimum and optimum basket of inputs and processes that each school must have if it is to be held accountable for a certain level of outcomes. The strategic plan refers to a Basic Minimum Package (BMP) of functional norms and standards below which no school should operate. Within this policy statement, the principle of functional norms and standards is further developed to address a minimum and optimum mix of functional education resource inputs.
- 4.10. A well defined basket of inputs will constitute minimum and optimum norms and standards for an enabling physical teaching and learning environment. Along a continuum from minimum to optimum and enriched functionality, the environments of our schools will be graded as meeting the criteria for safety, minimum and optimum functionality and enrichment.

The following constitutes a breakdown of operational definitions for these gradations for the learning and teaching environments. By way of example,

- 4.10.1. *basic safety* entails the bare minimum of safety requirements below which a school will be deemed inoperable and immediately closed. For example, if a school does not have safe water, sanitation facilities that meet national health standards, if learners are exposed to intolerable elements such as intolerably bad weather, toxic substances in their environment; extremely unsafe building structures that could crumble onto learners, classrooms overcrowded beyond a pre-defined threshold of classroom size, etc.
- 4.10.2. *minimum level of functionality* entails adequacy of inputs that make the school functional but not necessarily optimum. Among others, the school will have to meet minimum safety norms and standards and have the basic facilities that enable it to carry out its core functions of teaching and learning. Examples include a school that has adequate classrooms, ablution facilities, textbooks and basic supplies of fundamental teaching aids like rulers, etc;
- 4.10.3. *optimum level of functionality* is the level where we want all our schools environments to be. This level entails both minimum and optimum functionality resource inputs. Additionally it will meet a high level of resources inputs in core facilities like classroom, class size, specialised teaching spaces, staff preparation room, administration block, multipurpose learning resource centre, multipurpose school hall, laboratories and/or alternatives, adequate equipment, library or library stocks that are regularly renewed, accessibility for all, etc; and
- 4.10.4. *enrichment* level pertains to special programmes which may be launched from time to time as needs arise. A current example will be the Dinaledi project. From time to time a decision will be made on the thrust of these enriched environments, their duration, participation levels and the proportion of schools at any one time that should have such environments. Enriched environments are not intended to apply to all schools.

Key challenges addressed by this policy

- 4.11. The fact that most countries do not explicitly define minimum input and process norms required to realise results within their specific contexts is seen as the first challenge. It is more common to define financing norms in the form of funding formulae and/or per-capita financing. However, the emerging adoption of performance-based systems and accountability systems make it more and more important to define the “tools” required to deliver on expected performance and to define resources for which systems are held accountable.
- 4.12. Within a context like South Africa where unthinkable levels of deprivation co-exist with rare levels of resource endowment, where the need for equity and redress is as compelling as the need for global competitiveness; setting input and process norms and standards is a major challenge. The key challenge is to ensure equity without reducing every school to the lowest common denominator. It is to set standards while not losing sight of the

diversity and uniqueness required to promoting innovation. Equally, it is to ensure equity while not losing sight of the need to accelerate development.

4.13. The second challenge is to therefore develop balanced norms and standards. This policy area is the step in the direction of that crucial balance. The concept of balance is about proportional responsiveness of norms and standards to their context of application.

4.14. The third key challenge is being able to afford the set of endorsed norms and standards. Like any policy instrument, real norms and standards are what get implemented, not what is on paper. Often countries set norms and standards but do not adequately fund them. Often, shortage of funds leads to a gap between official and funded norms and standards with the latter being far less than the former. For instance, resource norms and standards implied in special projects like Dinaledi may make them unaffordable and/or unsustainable, despite whether or not more schools meet the 'admission' criteria.

4.15. The fourth challenge is capacity to implement norms. Even where funding may not be a binding constraint, implementation capacity may create a gap between funded and practiced norms; creating a third level of diminution. For instance implied or tacit pedagogical process norms made it very difficult for South African schools to effectively implement OBE as originally designed.

4.16. The fifth challenge is inconsistency of norms generated at different levels of the system. In some provinces for instance, a wide gap between the official and the practiced admission policies has led to a gap between a tacit norm for a catchment area and the practiced norm. In another province, the norm for optimum school size clashed with the national norm for school managers' salaries increase. This clash resulted in the violation of the former.

4.17. The sixth challenge is the need to balance equity with development.

4.18. The seventh challenge relates to norms that are not sensitive to the wide variation in the education contexts of South Africa's schools. For instance, the size of some schools may make certain inputs norms inefficient and/or impracticable. However, learners in such schools have the same rights as their counterparts in other settings. The challenge is to develop norms that allow for contextual adaptability that ensures learners comparable ETSD experiences. It is about developing norms that observe equitable quality while not violating efficiency and development responsiveness.

4.19. The current impression is that this country faces all the above outlined challenges. As elaborated below, the first challenge applies to the National Department of Education and less so to provinces. The rest—inadequate balance, resources, capacity, and inconsistencies apply to both levels.

Prior and ongoing efforts

4.20. In absence of National Norms and Standards, provinces have developed their own norms and standards, generating a set of 9 nine provincial norms and standards. What is in question is the adequacy of those norms and standards and, the extent to which they are

actually applied. The current level of variation underpins the justification for this policy direction.

Persisting challenges

4.21. Because of the lack of national norms, provinces are without guidance for the minimum limits. They are also without guidance on the optimum mix of inputs that should best facilitate desired results. Naturally, the set of 9 provincial norms and standards reflects the diversity of provinces. In general, the coverage of norms is limited. Invariably, they entail a specification of the size of facilities by band, school type and school size. The most elaborate specification of norms is perhaps from Free State and Gauteng provinces where the latter explicitly uses curricula as determinants of the type of learning spaces to be provided.

4.22. The current range of norms poses a serious challenge in the need to balance between equity and development. Hardly any province includes processes—specification of norms, consultation, delivery cycle, supervision of construction—in its specification of norms and standards. It is also uncommon for provincial norms to fully cover elements of the physical environment—infrastructure, furniture, equipment, etc. There is also a wide range of the detailing of norms and standards. In some provinces the above issues are very well developed in others they are vaguely stated. Across all provinces, the norms and standards are not products of a robust analysis of education needs—refer to Policy Area # 2—to be met through those norms. Except for the Gauteng province, even the space norms are divorced from the activities that actually take place inside those spaces. Prepared norms tend to be disconnected from core sector policies. This makes them a very weak instrument for operationalising policies.

Policy statement

4.23. *Effective from 2010/2011 financial year, norms and standards for the physical teaching and learning environment will be set at the national level by the Department of Education. National Norms and Standards will be set and expressed in terms of minimum and optimum provision. Along this continuum, norms and standards for basic safety, minimum functionality, optimum functionality and enrichment will be explicitly defined at a national level by the DBE. The DBE will also set clear target dates by which a set proportion of schools will meet each level of enablement. The DBE will also set a clear date by which all South African schools will meet the norms and standards for optimum functionality.*

4.24. *National Norms and Standards will be developed and will be fully adopted by the end of 2010/2011 financial year.*

4.25. *Provinces will adapt National Norms and Standards to their contexts without prejudice to set minimums. Effective from 2011/2012 financial year, all provinces will have aligned their plans and budgets in accordance with these norms and standards. By the end of the 2010-2014 strategic plan period, all schools will be applying all the necessary process norms and standards required to meet the basic safety and minimum functionality levels of performance.*

4.26. *As needs arise, national and/or sector strategic development priorities will be translated into enrichment norms and standards as defined by the Minister of Basic Education. These norms will be defined in response to current national and sector development imperatives. Such dictates may be the need to ramp up certain outputs such as in the Dinaledi project. It may be to fast track implementation reaching international benchmarks required to be competitive. It may be 'catching up with international developments' such as the mooted 'schools of the future'. It may be to create regenerative capacity that can later be applied to ramp up equitable quality such as in the creation of pockets of excellence. It may be to ride a global market tide as in the case where a certain skills mix is required within a short period of time. It may be the need to level the playing field where the floor is too low relative to the ceiling and needs to be raised within short time spans, etc.*

4.27. *The National Department of Basic Education will assume responsibility for the meeting of enrichment norms and standards.*

4.28. *Access to and benefits from enrichment norms will be equitable. In real terms, going beyond the optimum functionality norms and standards is creating justified inequality, the justification has to be explicit, transparent, and owned by a reasonable threshold of stakeholders. Such strategic inequalities should therefore be "mandated inequalities". The process and decision on who has the mandate or how the mandate is established will be transparent. Such a mandate will lie with the office of the Minister of Basic Education—because it is responsible for overall sector development.*

4.29. *Because "mandated inequalities" violate the national and sector "norm of equal opportunity" the distribution of opportunities to schools and/ or programs that go beyond optimum functionality level will itself be explicitly and transparently equitable.*

Key policy actions

4.30. *Adoption of a common and broadened approach / methodology for defining minimum and optimum norms and standards:* The current state of weakness in the articulation of norms and standards demands the articulation of a very clear methodology for articulating comprehensive norms and standards. In its initial form, such a methodology has to be based on international best practice and current provincial efforts at developing norms and standards.

4.31. *Adaptation of the approach to South Africa's context:* The adopted methodology will be adapted to fit the context of South Africa and the context of its diverse provinces.

4.32. *Adoption of a process for defining norms and standards:* Because of the technical nature of the work, the process for defining national and even provincial norms and standards entailed the setting up of technical working groups supported by international expertise. Working groups comprised a representation of physical planners, experts that can effectively represent subject groups and learning areas; sub-sector specialists; and specialists from critical thematic areas. The decision making process is the same as for Policy Area # 2.

4.33. *Establishment of capacity to effect norms and standards*: Where norms and standards cannot be readily implemented a capacitation plan and programme will be prepared to ensure their implementation.

4.34. *Establishment of a process for periodic updating of norms*: As contexts change, and as lower level challenges are met, norms and standards need to be updated to reflect current realities. Norms and standards will not be revised upward to fit resource availability or for other reasons. They will be revised upward or downward to meet priority needs and to optimise results. Norms and standards will be revised twice within each strategic plan period, once at the mid- term review of sector performance, and also at the end of the period as an entry to the next planning cycle.

Benefits

4.35. Minimum norms and standards are the first practical step to ensure equity in the provision of the physical teaching and learning environment, and associated benefits. If anchored in core functions of schools, norms should facilitate quality of the teaching and learning environment and the consequent impact on learning outcomes. If well articulated with policy priorities, norms and standards should facilitate efficient use of resources to realise strategic policy objectives. Implemented norms and standards should substantially reduce resource constraints for policy implementation. Process norms should reduce variance in the results realised through comparable inputs, thus further improving efficiency in resource utilisation. Ability to link results to inputs and processes is a powerful tool for accountability. It is difficult to be accountable if enablers are not clearly defined.

Risks and risk mitigation

4.36. *Complexity and delayed results [Low]*: Determining a minimum mix of inputs and processes required to enable schools to deliver on results is complex and may require long test periods. Even with the world's knowledge on the types of inputs and processes that facilitate results, application contexts differ. There is therefore a risk that expected results may only be realised after extended test periods and several adjustments.

4.37. *Failure to sustainably fund norms [Low]*: Failure to finance adopted norms poses a political risk, especially because such failure is associated with the perpetuation of inequalities. In the case of South Africa, this risk is low because of high government commitment to redress and the general predictability in the flow of funds.

4.38. *Perverse incentive for underperformance [Moderate]*: Norms and standards are like a social contract between the provider of inputs and those who mobilise them to bear results, or implementers. Even where not warranted, implementers may use unfunded norms and standards as an excuse for underperformance. This risk may be high where, for whatever reasons, there are substantial financial cut-backs.

4.39. *Interest-based resistance to enrichment norms [high]*: Even with all the consultation, transparency, and public education, enrichment norms will always be a source of political expediency. Political pressure groups will always package these norms as elitist and self-

serving. Parents are also likely to oppose these norms on the grounds of equity. This risk would escalate where benefits are not equitably and transparently distributed.

4.40. To mitigate the above-outlined risks, the development of norms and standards will be presented to stakeholders as a process and not an event. Consultation with stakeholders be maintained and adequate lead time will be provided to introduce these norms and standards in a phased manner.

4.41. To mitigate the political risk, an iterative learning by doing approach will be adopted during the introduction of these Norms and Standards.

4.42. Opportunities to benefit from enrichment norms will be transparently and equitably distributed.

4.43. Norms and standards are not a substitute for sustained performance management and performance evaluation. They are only enablers. These systems will therefore be strengthened to ensure that norms and standards enable expected results. They will also be strengthened to ensure that norms and standards are not used as an excuse for under-performance.

Policy Area # 2: Systematised establishment and prioritisation of infrastructure needs

4.44. The significant investment to be made has to be based on a clear understanding of the needs to be addressed and on the clear prioritisation of those needs. Several reasons necessitate clarity of needs and prioritisation of those needs. First, is that where resources are limited, applying those resources toward meeting real and urgent needs becomes an imperative. Second, is accountability for use of scarce public resources. Third, is the need to realise the best value for money. As noted, investment in elements of the physical teaching and learning environment is justified by their relative contribution toward the realisation of core national and sector policies. Limited funds should therefore be spent on elements that have the highest contribution toward realising policy objectives. Money spent on desirables while real needs remain unmet is money lost. Fourth is the equity imperative. It is easy to ensure equity of provision where needs are clearly defined and prioritised.

Key challenges addressed by this policy

4.45. Despite these compelling reasons, the substantial and increasing investment in elements of the physical teaching and learning environment has mostly proceeded without a systematised process for prioritising needs. Part of the reasons behind inconsistencies in setting priorities has been the lack of National Norms and Standards, and the weak definition of targets toward meeting those norms.

4.46. Lack of a national and/provincial priority setting system has left provision vulnerable to all sorts of pressures. Real ones include unplanned settlements that sometimes lead to expansion of schools beyond the minimum and optimum functional norms and standards, political pressure coupled with unmonitored projects, sometimes lead to duplication of provision.

4.47. Because needs are relative, the lack of a national system to identify and prioritise needs risks the perpetuation of inherited resource inequalities across schools. It is also possible that resources could be inefficiently utilised or applied on areas of least impact.

Prior and ongoing government efforts

4.48. At the national level, the best indication of some system for identifying and prioritising needs is implied in the current version of National Norms and Standards for School Funding. Herein, priority is accorded to areas where there is first: total lack of a school and/or overcrowding in existing schools. The norms further stipulate that in allocating funds to new schools priority should be given to facilities that serve the compulsory GET and extensions to existing schools except where such extensions would lead to unmanageable and unacceptable school size. These criteria are then applied to rank geographical regions from the most to the least needy.

4.49. Provinces have also come up with diverse ways of identifying and prioritising their needs. For instance, infrastructure priorities for the Gauteng province are derived from a list of needs identified by districts and transmitted through physical resources planners. Criteria applied by districts remain unclear. The ultimate selection of priorities seems to be dictated by the available budget for the particular year.

4.50. The North West Department of Education sets annual priorities. For instance, their priorities for the 2004/05 financial year comprised intensive infrastructure development emphasising on the provision of sanitation facilities; provision of new schools and extensions; and the provision of information and communication technology; and, the improvement of libraries, equipment and the refurbishment of laboratories. Again, these criteria remain unclear.

4.51. Similarly, the Limpopo Department of Education sets annual priorities. For FY 2005/06, these were: provision of classrooms where learners are being taught under trees; the building of classrooms where children were housed under unacceptable conditions (i.e. converted buses, poorly constructed corrugated iron buildings); and overcrowded classrooms (> 40 learners in primary and > 35 learners in secondary learners per classroom). In contrast to the list from the North West province, this list seems to be dealing with basic needs.

4.52. For the KwaZulu-Natal Department of Education, priorities are based on a regular gap analysis of the available classrooms and the need for classrooms at existing facilities using information captured in the EMIS or by tracking new developments. An overcrowding index is used to identify the need for additional classrooms. As with Limpopo, the priority here seems to be the eradication of classroom shortages.

4.53. The Eastern Cape Department of Education focuses on the eradication of overcrowding. This is along similar lines as Kwa Zulu Natal and Limpopo. They make use of information from their Education Facilities Management System (EFMS) and their EMIS. Unlike the bottom up process followed in Gauteng, priority lists are generated at the provincial levels and then discussed with districts to explain the rationale for selected priorities and consulted information sources. The final draft is sent to the Superintendent General (Head of the Department) and the MEC for approval.

4.54. The Northern Cape Department of Education base their priorities on a consideration of three data sets: the latest population statistics and trends from the latest census data; information regarding the number of learners per school from the EMIS data as well as the resource targeting table (this lists all schools in the province and their conditions as well as the poverty level of the community).

4.55. In Mpumalanga priorities are influenced by a range of factors including the State of Nation Address; State of Provincial Address; policy and budget speeches by the national and provincial Ministers of Education. There was a point where priority was accorded the removal of learners from underneath trees, from unsafe structures and from overcrowded structures. While it is not clear if these challenges are surmounted, priority has currently shifted to the creation of Grade R facilities. This is a clear demonstration of how new sector policy directions may sway provincial priority setting processes. As noted in Chapter 3, the lack of clear prioritisation and trade-off across sector policies is in itself problematic. From a priority setting point of view, a question needs to be debated whether removing children from unsafe environments and from underneath trees should take precedence over the provision of Grade R facilities. This is a policy issue that requires some strategic direction.

4.56. All the same, in Mpumalanga, priorities are set at the regional level by physical resources planners in coordination with circuit managers and then sent to the provincial office. This is somewhat similar to Gauteng province but not quite the same. As in most provinces, priorities do drive the budget. However, the available budget determines the ultimate list of priority projects.

4.57. In the Western Cape, schools that fall below funding norms (based on the quintile) are regarded as priority. The rest of the provision is driven by the available budget. Priorities are set at the district level and forwarded to the provincial office where verification and budgeting is done.

Persisting challenges

4.58. A picture that emerges is that of substantial inconsistencies in the criteria and processes for setting priorities. It is quite possible that there are as many processes and criteria as there are provinces. Below the province, the criteria that districts/regions follow in setting priorities are furthermore unclear. Furthermore, the criteria and processes that provinces set for themselves are not always adhered to. One of the constraints is lack of timely and accurate data. Sometimes, this leads to locating facilities in areas of relatively less need. As provincial officials admitted: "most times is the voice of the loudest that gets heard". Anecdotal evidence from provinces also suggests that crisis remain a key determinant of priorities. Resources tend to follow crisis and crisis determine priorities. In the absence of crisis, there is ample room for political pressure. It is not uncommon to find schools built in areas of low demand while areas of high demand are neglected. Children from the latter get bussed to under-utilised schools. Areas with strong advocates get prioritised despite their moderate to low needs. Provincial officials also admitted that new schools tend to be prioritised and that "over-resource" new schools are prioritised over the dire needs of old schools that may have been in need of attention for long periods. This perceived preference

accorded new schools could be interpreted as an intended inequity of resource distribution. Overall, there is justification for a national policy intervention to regularise this process.

Policy Statement

4.59. *During 2010/2011 financial year—criteria and procedures for the identification and prioritisation of the teaching and learning environment needs will be nationally standardised by the Department of Basic Education and guidelines prepared. Provinces must adapt national procedures to reflect their unique contexts. Provincial adaptations must not lower the national minimum criteria. Provincial adaptations may only pertain to enrichment but not diminution. Irrespective of the source—individual school funds, donor funding, public funds—all resources available to Provinces have to first be applied toward meeting nationally set priority needs. Except where nationally set priorities are fully met, Provinces must not apply funds for enrichment purposes.*

Key policy actions

4.60. The regularisation of need identification and prioritisation will demand the following key actions:

4.61. *Systematisation of information and data sources to be consulted:* The minimum criteria for qualitative sources to be consulted will be: *curricula, pedagogy, co-curricula activities, management, the needs of learners and what facilitates learning, educators' needs in terms of what facilitates teaching, staff development, lesson preparation, learner tutoring etc. and communities.*

4.62. Curricula, co-curricula and pedagogical imperatives will rank high among priority needs for the provision of school infrastructure, furniture, equipment, books and instructional materials. At present, the provision of the teaching and learning environment does not take serious consideration of curricula, co-curricula and pedagogy, yet the primary reason for providing this learning and teaching environment is to facilitate the delivery of certain curricula to learners using certain pedagogy. It is not surprising that educators see the current physical environment as inhibiting rather than facilitating teaching and learning.

4.63. The case is very different for equipment, books and instructional materials. A major constraint here is shortage, not lack of responsiveness. School infrastructure will also meet the needs of school management. It will reflect consideration for *learners* in terms of their age and what facilitates learning (ref. conceptual framework); *educators* in terms of what facilitates teaching, learner academic, health and nutrition, psychosocial and pastoral support; staff development activities; preparations for teaching; *managers* in terms of what facilitates school management; and *communities* in terms of what transforms a school into a centre of community life.

4.64. School infrastructure that does not take into account minimum needs identification and prioritisation criteria outlined above will not be cleared for funding. Additional criteria are: technological advancements and how they may change priority needs for infrastructure provision.

4.65. At the bare minimum, the following sources of quantitative data will be consulted: *community demographics, enrolment projections* and implied future demand for schooling; *migration patterns* and the likely change in demographics; *stability of community demographics* and implications for the most responsive and efficient infrastructure provision; *internal system efficiency indicators*; and baselines on current supply where NEIMS will be required to be updated and kept current.

4.66. *Systematisation of data and information collection*: Data and/or information are as useful as the way they were collected. To this effect, data collection instruments and guidelines will have to be prepared and training conducted to ensure the integrity of data. Information and data sets will have to be kept current and accurate.

4.67. *Strengthen data analysis and information processing; targeted dissemination and application*: Information and data remain a potential until they are analysed to bear a substantive and applicable meaning. Applicable meaning also remains a potential until it is in the hands of those with the power and mandate to apply it. The definition and prioritisation of needs will therefore be informed by systematic data analysis, information processing, targeted dissemination.

4.68. *Systematise data / information currency*: Data/information is as useful as it is current. Core data bases such as the NEIMS and EMIS will have to be kept current. Systems for keeping them current will have to be developed and effected.

4.69. *Systematise participation and decision making*: As noted, needs identification and prioritisation has to be based on broad based consultation. Critical participants in this process need to be stated. The proposed minimum participants are: educators, learners, communities—through some legitimate representative body—and physical planners. It should however be clear that participation is not decision making. Thus, the process of translating inputs from participants into a decision on priority needs has to be clear, transparent and accountable. The proposal is that following nationally set criteria, the head of the PEDs will prepare the priority list in collaboration with her/his structures. The list will be proposed to the MEC for clearance and then sent to the DBE for ratification.

4.70. *Systematise process*: As noted different provinces follow difference processes for defining priority needs. Future process will be a combination of top-down and bottom-up processes. The latter will start at the lowest operational level which is a school. It will be guided by real and felt needs that have a direct bearing on performance. Each operational level—school, circuit, district, province—will standardise its own process of identifying priority needs including participation and decision making. The compilation of needs will cascade upwards from schools to provinces using a representational participatory and decision making process. Thus, some representation of schools will be at the circuit level when needs are prioritised and forwarded to the district etc. The top-down process will start at the national level. It will be informed by broader national policies and even by broader policies on international benchmarking and best practices. This process will ensure consonance between the final list of priorities and overall national policies and priorities.

4.71. *Gradate prioritised needs and define backlogs*: Once the needs are clearly identified and prioritised, a gradated list will be prepared to reflect the severity of needs. The proposed

list will range from basic safety, minimum functionality, optimum functionality and enriched in terms of specific objectives. Each category will be operationalised to avoid ambiguity. This national list will be used to operationally define backlogs, and to prepare a program for the provision of an enabling physical teaching and learning environment. The list will provide a backbone for a national strategic plan for equitable provision.

4.72. **Key considerations:** The provision of basic services entails the participation of other public departments such as DWA, DoE, Health and Public Works.

4.73. Another consideration is that of **special projects** (enriched) that are intended to balance equity with development imperatives in the case of the Dinaledi project. Clearly, minimum criteria would not apply. However, there will need to be clear and transparent criteria for equitable admission to, and benefit from such projects.

Benefits

4.74. The standardisation of need identification and prioritisation is expected to improve equity in meeting the needs of the physical teaching and learning environment. This is particularly critical in the case of South Africa where the priority needs for some schools are simply leisure items for others, and yet all children are constitutionally promised equal education opportunity. The second benefit is that it is easy to link priorities to areas that are likely to bring the best value for money in terms of inputs that have the highest potential to bring about desired results. Improved results will necessarily mean improved sector policy impact. This will in all probability probably improve technical efficiency. The third benefit, and related to the second one is that there will be a systematic and transparent way of ensuring and monitoring equity in the use of scarce resources. This will also improve resource efficiency. The fourth benefit is that the gradations of levels of provision are possible when criteria are clear and standardised. In turn, clear gradations make national and international benchmarking feasible. Clear benchmarking greatly facilitates termed strategic planning, monitoring and evaluation, and public accountability. Those in office are best able to account to the public when they set clear benchmarks for their own performance.

Costs

4.75. The upfront costs of standardisation is time invested in participatory processes and in establishing systems, protracted consultations required to get stakeholder buy-in, and ongoing consultations around changes impelled by evolving contexts. There are also up-front financial costs in setting up systems, but this is offset by the long term benefits and savings accrued from these systems.

Risks and risk mitigation

4.76. *Provincial perception of loss of autonomy [Moderate]:* Provinces may interpret the proposed policy as a diminution of their autonomy. To mitigate this risk, the DBE will ensure that processes for setting priorities follow normal consultative and participatory procedures and channels.

4.77. *Reduced financial contributions [Low]:* Communities, individuals and donors with 'pet' projects may reduce or withdraw their contributions. To mitigate this risk, the DBE will

ensure that key stakeholders are substantively consulted in the process of setting and adopting criteria for priority setting. Criteria for setting priorities should not be changed without the participation of key stakeholders.

Policy Area # 3: Planned development of an enabling environment

Background

4.78. As alluded to under Policy Area # 2, elements of the physical teaching and learning environment account for the highest proportion of the sector development budget. Over the first decade of freedom, this investment grew from about R 352 million to about R 4.95 billion. With the urgency accorded the redress of inequalities in the provision of infrastructure and other elements of the physical environment, this allocation can only be expected to increase more exponentially. This growing investment continues to be made within a very weak culture of planning. As outlined under Policy Area # 2, there is no clear mechanism of clearly identifying and prioritising needs. Strategic planning seems to be underplayed also because of a sense that urgent needs are so many that the risk of attending to low priority needs before high priority needs is slim. However, evidence from the field suggests the contrary. It could actually be argued that it is exactly when the needs are many that strategic planning is even more critical. In essence, strategic planning is about identifying priorities and making strategic choices and trade-offs among them. Without strategic planning any need is as important as the other.

Prior and ongoing efforts

4.79. Provinces produce their own annual plans for the provision of school infrastructure and basic services that are identified at different levels: circuit, district/regional and provincial. These plans provide a platform for a service contract with the Departments of Works or with the implementing agent. However, the reality on the ground is that these plans are technically deficient and not always produced on time. The IDIP is working toward improving planning for the provision of school infrastructure. Each province is provided a technical assistant to improve planning and overall service delivery.

Persisting challenges

4.80. As outlined under Policy Area # 2, the first constraint to strategic planning is the lack of a system for identifying and prioritising infrastructure needs. Without clear priorities there is no need to plan. The second challenge is the lack of capacity for strategic planning. Several studies have noted that in general, physical planners are ill prepared for their functions. In most cases, physical planning functions are executed by trained teachers, with very little preparation for their new function. For the best part, this weakness has been documented but little to no action has been taken to address it. Effective strategic planning is also constrained by lack of accurate and timely data, low capacity for data analysis, and low capacity for translating data into strategic objectives and targets. Without strategic plans, the provision of infrastructure is prone to political influence. Priorities tend to be decided along the way, allowing pressure groups to determine priorities. Lack of strategic plans also makes it difficult to tie budgets to strategic policy priorities, especially when the latter is unclear. Without strategic plans, it is difficult to set targets against which provision could be

monitored. Under the circumstance, accountability for policy implementation is significantly weakened.

Policy statement

4.81. *Effective from 2010/2011 financial year, the DBE will adopt the planned development approach to the establishment of the physical teaching and learning environment. A national strategic plan will be developed in line with critical sector and thematic policy priorities. The national plan will be prepared on a long term—20 years—medium term—5 years—and short term basis—1 year. It will set national and provincial strategic objectives and targets to be achieved within each plan period. The strategic plan will provide the substantive base for investment planning. Irrespective of the source, the financing of the physical teaching and learning environment will be provided within the framework of the strategic plan.*

4.82. *In addition to the strategic plan, the development of the physical environment will be guided by mandatory recurrent planning instruments vis annual implementation plans, procurement plans, financial and disbursement plans. The national department will also develop mandatory medium term and short term results frameworks that will guide the monitoring and evaluation of the development of the physical environment.*

4.83. *Consistent with the national approach provinces will adopt the planned development approach to the physical teaching and learning environment. Provincial plans will be set within the same terms as the national plan. They will reflect strategic objectives and targets as set in the national plan. Likewise financial provision will be provided only within the framework of the provincial plan.*

4.84. *Provinces will also develop all plans that are mandatory at the national level. Their provision programme may not be funded before clearance of mandatory plans by a set authority.*

Key policy actions

Strengthening capacity for strategic planning and for physical planning: By 2010 the DBE will have prepared an implementation plan for the training of physical planners and submitted to Seta for accreditation to address the planning needs of practicing physical planners in school physical planning.

4.85. *Regularising the strategic planning process:* The development of a national strategic plan and other plans will follow a combination of a top-down and bottom-up approaches similar to those outlined under Policy Area # 2.

4.86. *Systematising information and data sources for forecasting the demand and supply of teaching and learning environment:* Strategic planning is as sound as its information and data base. In addition to data sources outlined under Policy Area # 2, proposed key sources of data will include economic growth forecasts and assumed growth scenarios.

Benefits

4.87. Plans guide implementation. In this regard, strategic planning is the first step toward effective implementation of proposed policies. Strategic planning also ensures relevance to strategic priorities. Without planning, an infrastructure programme may lose its responsiveness to strategic sector priorities. Clear plans also increase their flexibility to strategically adapt to changing contexts. Without plans, tactical changes may incrementally lead development off course. The integration of strategic plans with budgets ensures and reduces the risk of un-funded priorities. Planning is also a key tool for resource efficiency. Planning also facilitates the monitoring of results and accountability for results.

Risks and risk mitigation

4.88. A key risk to the adoption of planned development is a perceived concentration of power and control at the centre. It may be interpreted by some as a reversal of decentralisation and its related perceived benefits.

4.89. To mitigate this risk, the strategic planning process will be used to strengthen rather than polarise the provincial and the national level. This can be attained through genuine consultation and a real—not symbolic—combination of top-down informed by bottom-up planning processes.

Policy Area # 4: Standardised architectural designs

Background

4.90. Architectural designs are a spatial and aesthetic response to sector policies priorities outlined in Chapter 4 and priority education needs implied in Policy Area # 2. Because form should follow function, architectural designs will respond to priority functions and activities to be performed within designed physical spaces. Other than functions, architectural designs are also an expression of local, national and international construction standards. They are an expression of the demands of diverse end-users from learners to communities. Because of diverse standards and contexts that designs have to respond to, and because designs are as functional as they are aesthetic, there is wide scope for variation in the designs of physical teaching and learning spaces. Variation in designs leads to variation in climatic and contextual suitability; effective functionality; construction time, materials and costs; intensity of construction supervision and management; ease and cost of maintenance; etc.

4.91. To narrow this variation, and the burden it places on the government, most education, training, and skills development systems develop standard architectural designs to which all buildings must adhere. Because of the range of education needs and institutions, and because of the range of context, standard designs are developed as a menu from which PEDs may choose an appropriate design. This menu constitutes what is referred to as a menu of prototypes. To further ensure responsiveness to specific and unique contexts and sites, parameters are set for the adaptation of prototypes into specific designs right up to sites.

Key challenges addressed by this policy

4.92. In contrast to international practice, infrastructure development in South Africa seems to be proceeding without a menu of prototypes that suit specific contexts. Yet, the very social, geographical and sector diversity offered by South Africa seems to warrant such an approach. Without some form of standardisation of designs, un-tempered variation seems to be the norm. Unwarranted variations are not only across provinces, but across service providers. Consultants have been found to design to their taste and to their judgment of suitability, etc. Such diversity leaves the government with the burden of having to manage implications of these designs for climatic and contextual suitability; technical and substantive responsiveness; construction time, materials and costs; intensity of construction supervision and management; ease and cost of maintenance; etc

Prior and ongoing efforts

4.93. Overall, provinces have standardised designs—mainly traditional classroom blocks—which they seem to apply across diverse contexts; albeit very unevenly. There seems to be no national and/or provincial efforts to develop a menu of prototypes that respond to priority sector policies, the core functions of schools and the diversity of school types and the diversity of contexts.

Persisting challenges

4.94. The most critical challenge is diversity, not in itself, but because of its implications. Lack of standard designs leaves infrastructure development highly prone to irrelevance to education policy priorities. Lack of responsiveness of designs reduces usability; it makes for a less conducive teaching and learning environment and the consequent adverse effects on learning outcomes. To the extent that variations in elements of standard designs affect teaching and learning (ref. Chapter 3), lack of standard designs is a key cause of inequalities in the distribution of learning outcomes. Without standard designs it is very difficult to control the construction costs. In one visited province, wide variations in construction costs were attributed to the use of different structural designs and construction norms. Clearly, such variations make it difficult to estimate unit costs and to map levels of delivery to available resources. Wide variations in designs also make it difficult to articulate service standards and to keep delivery timelines. They are particularly time inefficient because each construction process has to start with the design phase which is not necessary in all cases. Complex designs will take longer to deliver than simple ones. Variations and complexity of designs could also lead to maintenance costs downstream and to difficulties in sourcing local labour to do what could have been simple maintenance. All these factors translate into inefficient resource utilisation and difficulties in planning service delivery. Without standard designs consultants may showcase their designs without much consideration for sector policies or end users.

Policy statement

4.95. *During 2010-2014 strategic plan period, all new construction and extensions will follow prototype space norms and designs. Wherever possible major rehabilitation will integrate key elements of the standard designs—e.g., accessibility. The National Department*

of Basic Education will produce a menu of prototypes designs for the space norms to match the gap typology of schools. The designs will be a product of a clear analysis of key education functions and activities to be carried out within proposed physical spaces. Design prototypes will respond to core activities and facilitate them. Standard designs will also be guided by core sector policies such as physical access and substantive relevance. Provinces may adapt standard designs to specific geographical contexts and to specific construction sites. Such adaptations will not digress from the essence of the design, and especially not reduce responsiveness to policy priorities and sector needs.

4.96. *A standardised menu of prototypes will be used to create cost maps to guide and where necessary to control construction costs. An allowable margin of variance from the cost maps should be determined and circulated. Any new construction that goes beyond allowable variance will be subject to prior review and subsequent clearance by the head of a provincial department—. The clearance system will be embedded in the procurement process and become part of the criteria for bid evaluation.*

Key policy actions

4.97. *Development of a menu of prototype designs:* A broad base of expertise in the field will be tapped to contribute to the development of a menu of prototypes. Such a base will include the physical planning units of the national and provincial departments; association of architects; consultants and consultancy firms; and educators.

4.98. *Creation of cost maps:* Based on their textured knowledge of their contexts, provincial departments will lead the creation of cost maps. Provinces will in turn forward these maps to the national department for review, inputs and adoption. Once adopted, provinces will take primary responsibility for monitoring adherence to cost maps.

Benefits

4.99. Expected benefits of design prototypes and cost control are: increased efficiency in the use of available resources, improved responsiveness of designs to priority sector policies and sector needs, and easier maintenance.

Risks and risk mitigation

4.100. *Reverse impact on construction costs [Moderate to high]:* In a context of scarcity of suppliers such as in South Africa, cost control measures may repel potential suppliers and limit competition. The end result could therefore be increased costs accrued from limited competition, which is the reverse of the policy intention. This risk could be high if the education sector is the only one instituting cost control measures.

4.101. *Reduced quality of construction [Moderate to high]:* Constricted competition could also risk the quality of construction if skilled suppliers go where there is less cost control.

4.102. To mitigate the above risks, the application of cost maps will have to be guided by market demand and supply. In times where there is high demand, it may be wise to ease the application of cost maps and let the market determine the price. More open procurement

methods than currently used could be used to mitigate this risk. Specifically International Competitive Bidding (ICB) could be applied to expand the supply. PEDs could enter into negotiations with suppliers' associations and or professional bodies to secure more favourable responses within the parameters of their cost control.

Policy Area # 5: Management and Maintenance

Background

4.103. Elements of the physical teaching and learning environment constitute the largest proportion of the sector's immovable assets namely land, buildings, etc. These assets appreciate in value. However no policy exists for the management and maintenance of these assets. Although these assets hold substantial value, there is no mechanism for capturing, tracking, and accounting for their value. There are also no mechanisms for securing their value. It is not clear if these assets are insured and what happens if they are exposed to risk that leads to substantial damage—the often cited floods—or even total loss. Beyond their financial value, immovable assets provide the physical space that translates into education access. If well maintained and managed, they provide conducive environments that translate into quality education. If well maintained and utilised, they can realise substantial efficiency gains. Participation in their management and or maintenance can contribute to national poverty alleviation goals. It can also deepen national and sector values of school-community relationships and community ownership of schools.

Key challenges addressed by this policy

4.104. A key challenge is that there is no national and or provincial policy on the management and or maintenance of immovable assets. A weak policy environment leads to weak planning for and weak budgeting for asset management and maintenance. It is clear that poor asset management and maintenance translates into unaffordable resource wastage. No single province exists that seems to adequately manage the use of, and the maintenance of its assets. The proportion of buildings that are in a state of disrepair as registered in the NEIMS bears evidence of the results of poor maintenance. Poor maintenance results in a shortened life-span of assets which trap scarce resources in perpetual major repairs or even replacements. It would be difficult to observe norms and standards for the durability, life-span and replacement of assets if they are either mismanaged or not well maintained. Severe states of degradation of assets poses health and safety hazards for learners and educators. Both the NEIMS and anecdotal evidence bear witness to mismanaged assets. For instance under-utilised and over-utilised school infrastructure, equipment and furniture are common place. Assets that are poorly managed or maintained translate into a sub-optimum teaching and learning environment. Mismanagement and ill maintenance of assets violates the nation and sector resource efficiency goal. The conceptual framework presented in Chapter 4 suggests that such an environment would have adverse effects on teaching and learning. They work against efforts to improve educational quality. Wide variance in the quality of education that learners are exposed to contradicts the norm of equal opportunity enshrined in national and sector policies.

Prior and ongoing efforts

4.105. The national department has made several efforts to establish and maintain baselines on the level of provision and state of immovable assets—among others. This has taken the form of two school registers of needs (SRNs) and lately, the NEIMS. On the negative side, prior efforts at establishing baselines do not seem to have translated into sustained and current registers. The NEIMS was designed to address this weakness. In terms of management, provinces and schools make inadequate and uneven efforts to manage immovable assets. Anecdotal evidence shows that a lot of schools and provinces maintain current asset registers. Both levels also make inadequate and uneven effort to maintain assets. Provinces have maintenance manuals for buildings, but it was not clear if they have the same or equivalents for furniture and equipment.

Key achievements

4.106. Although too early to tell, all indications are that the NEIMS will translate into an enduring and current database of fixed and other assets. If used to its capacity, and kept current, mined and analysed, NEIMS could be used to inform policy and strategy on provision.

4.107. At the provincial level, the North West Province has developed a draft policy on the management of immovable assets. However, this policy has remained in a draft form. It does not seem to be owned by the province and consequently not adopted and implemented.

4.108. While provinces and schools make an effort to keep current asset registers, it is not clear if and how the value of these assets is reflected in the financial management systems.

4.109. Through their School Governing Bodies (SGBs), communities have demonstrated to a varying extent efforts to raise funds for the maintenance of immovable assets. In addition, the maintenance of immovable assets is one of the core activities that seem to effectively concretize community participation. Although marginal, community participation in the maintenance of assets contributes to a broader national poverty alleviation goal.

Persisting challenges

4.110. The lack of policies on asset management and maintenance allows for the wide range of practices and performance. In the case of maintenance, inadequate financing continues to be a binding constraint. Where funds could be adequate, poor budget management practices have allowed for their use of funds on other activities such as the construction of new schools or urgently needed replacements.

Policy statement

4.111. By the end of 2010/2011 financial year the DBE will have developed national policy on an educational immovable asset that will be in line with GIAMA. Minimum parameters of this policy will include: standardised acquisition of assets; standardised and current register of assets, current information and data base; standardised recording and tracking of the value of assets; insurance of the assets; efficient usage, timely and adequate maintenance,

rehabilitation, and disposal. The policy will inter alia entail norms and standards for preventive and corrective maintenance as well as replacements. It will entail the allocation of responsibilities for certain types of maintenance in terms of financing, execution and quality assurance. This policy will be under implementation by provinces and schools during 2010-2014 strategic plan period.

Key policy actions

4.112. *Verification and validation of baseline data:* The NEIMS provides a good starting point for systematising, validating and maintaining data on the current state of immovable assets. It is urgent that a system is set up for keeping this data current.

4.113. *Analyse NEIMS:* Further analysis of the NEIMS will be conducted and targeted to facilitate policy development and strategic planning.

4.114. *Technical support for provinces and schools* will be provided to enable them to set up their asset registers, to accurately record the value of their assets and to integrate these values into regular asset and financial management.

4.115. *Provinces and schools will also be provided with technical support to assist with policy implementation.*

Benefits

4.116. Expected benefits of an asset management and maintenance policy include: prolonged life-span of assets, efficient utilisation and better value for money; improved learning environments and the resultant education quality; if evenly implemented, improved equity of inputs and outcomes.

Risks and risk mitigation

4.117. There are no envisaged risks for this policy.

Policy Area # 6: Diversification of funding sources

Background

4.118. It would appear that at present, the government finances more than 90 percent of the capital investment in school infrastructure, basic services, furniture, equipment, books and instructional materials. Two key public financing mechanisms are equitable share and conditional grants. As noted, the level of investment in infrastructure alone has phenomenally increased over the past decade and is bound to continue growing. Given competing demands on public resources, it is prudent for the government to aggressively diversify sources of funding for not only the physical teaching and learning environment, but also for the sector as a whole.

Key challenges addressed by this policy

4.119. Most provinces are reluctant to diversify funding sources for their development projects. Non-public funds, especially donor funding is not preferred for its unpredictability and the consequent uncertainties in provincial plans. Lack of experience in raising non-public funds remains a challenge. In the recent past, a key challenge of National and Provincial Treasuries was how to effectively disburse resources allocated to the sector—giving rise to the development of the IDIP. Given the demonstrated low absorptive capacity and South Africa's middle income status, the sector does not attract as much external funding as its needs warrant. This is a critical challenge, especially given the reality that external donations may quickly wane as the post-apartheid years increase and South Africa is more and more seen as having had adequate time to redistribute its indisputable wealth. South Africa does very well in leveraging the private purchasing power for sector services. However, the reality is that real private purchasing power is still in the hands of a limited minority. The thin resource base of some households and communities severely constrain their contribution. In fact income inequalities remain a key challenge to attaining equity of resource distribution within the sector. An institutional challenge is South Africa's tendency to set up extremely complicated institutional arrangements for raising funds and accessing them. Caution needs to therefore be sounded to avoid similar situations with respect to this initiative.

Prior and ongoing efforts

4.120. It first needs to be acknowledged that this very exercise is the ongoing national department's effort at diversifying funding sources for school infrastructure. The National Treasury has already set up structures and systems for diversifying funding sources for not only school infrastructure but infrastructure as a whole. This is in the form of a PPP unit at the central Treasury. Within the sector, several efforts are also ongoing to diversify sources of funding. School heads and SGBs continue to receive training in resource mobilisation—albeit at a very limited level.

Achievements

4.121. Through the initiative of the National Treasury, the financial absorptive capacity of provinces is expected to substantially improve. The Department of Basic Education attracts modest donor funding for school infrastructure such as the EC funding. Despite income difficulties among many households, South Africa, and the Department have maintained the self-reliance value in the sourcing of funds from communities and households. Although the results are very uneven, there are very clear pockets of excellence with schools, communities, and SGBs that manage to raise substantial funds for their school infrastructure projects. It is also commendable that South Africa and the Department have not followed the international development agencies push for free education. Commendable achievements are being registered in the complex but necessary task of balancing of need-based public financing and affordable private financing of education and training services.

Persisting challenges

4.122. While improving the absorptive capacity of the national and Provincial Department of Education is still an impediment to raising both public and non-public financing. The apparent lack of clear efficiency controls is also a deterrent to potential non-government contributors. Perceived financial self-sufficiency is a persisting challenge. Most provinces do not show the need or urgency to raise non-public financing. The limited resource base for the majority of households will remain a challenge for a long time to come.

Policy statement

4.123. By the end of 2010-2014 strategic plan period, the DBE will be actively engaging in an approach to apply alternative funding mechanisms. All financial mechanisms must be in line with Section 24 of the Constitution and will be coordinated by National Treasury. Among the range of financing mechanisms that will be considered and mapped to appropriate contexts will be: private public partnerships (PPPs), the leveraging of private purchasing power (LPPP); and the use of international donors. Provinces will be engaged in supporting this approach.

Key policy actions

4.124. The most significant action is for the national and provincial departments to establish processes and mechanisms for resource mobilisation.

Benefits

4.125. An expected benefit of the policy is a more targeted matching of mechanisms to context and opportunity. Other benefits are the fast tracked delivery and expected development impact; expanded and elevated delivery of elements of the physical environment and the resultant impact of learning outcomes and education quality; improved efficiency gains in the use of resources; and, if equitably distributed, improved equity of inputs and hopefully outcomes.

Risks and risk mitigation

4.126. If unsuccessful, policies to diversity sources of capital budgets can lead to unsustainable recurrent budget implications for the government.

4.127. To reduce this risk, proper simulation procedures will be used to avoid over-committing the government to expenditures it cannot sustain.

Policy Area # 7: Demonstrated delivery capacity**Background**

4.128. Effective implementation capacity is critical for the above outlined policy areas to take effect and for expected benefits to be realised. Key capacities required for effective delivery of an enabling environment include: long term strategic planning for policy

implementation; the development of feasible medium term programmes; planning for programme implementation, procurement and disbursement planning and management, financial management, timely collection of accurate data to support sustained monitoring of program implementation, analysis of data to inform policy implementation and core decisions, and periodic evaluation of policy impact.

4.129. Currently these capacities ought to be at different levels of government and its systems. The DBE should have effective capacity for strategic planning, development of national medium term implementable programmes that provinces can adapt to their contexts, timely collection of accurate data to support sustained monitoring of programme implementation, analysis of data to inform policy implementation and core decisions, and periodic evaluation of policy impact. For its success, the DBE depends on the support of other national departments key among which are Treasury and Public Works.

4.130. The PEDs on the other hand ought to have capacity for the development of provincial infrastructure programmes and for their implementation. This places responsibility for core implementation functions on provinces. Specific capacities should include planning for implementation, procurement, and disbursement; monitoring programme implementation at the provincial level, and periodic reporting on implementation progress. For their success, provinces depend on the support of other provincial departments particularly Treasury and Public Works, lower levels of the provincial structures from districts to schools, the DBE and private consultants and firms.

4.131. Both the DBE and the PEDs require strong organisations with very clear division of labour to undertake their respective mandates, the right numbers of human resources with a skills mix that are appropriately matched to organisational mandates, sufficient non-human resources—fiscal, time, equipment, materials and appropriate procedures that facilitate the execution of the mandate. In addition, both the DBE and PEDs depend on a broader enabling national environment such as the availability of appropriate skills in the labour market, availability of materials, and an appropriate regulatory framework.

Key challenges addressed by this policy

4.132. Currently the delivery of infrastructure does not seem to have the benefit of a strong organisational structure with a clear division of labour across all levels. The delivery of infrastructure is currently fragmented amongst three different departments at national and provincial level, they are namely; DBE, DPWs and Treasury. Fragmentation complicates coordination, creates role conflicts, tends to duplicate efforts, weakens accountability, and slows down implementation.

4.133. The second most critical challenge is the shortage of human resources with the right skills mix to execute organisational mandates.

Prior and ongoing efforts

4.134. The DBE has devolved authority for implementation to the provinces. Further, there is a fairly clear division of labour between the DBE and the PEDs.

4.135. PEDs and Provincial Department of Public Works (DPWs) are currently the core implementing institutions in the 9 provinces.

4.136. Through the IDIP, National Treasury provides Technical Assistance (TA) to strengthen the capacity of the core implementing agents. PEDs and DPWs augment their capacities by using diverse implementing agents including communities, school governing bodies (SGBs), and private consultancy firms.

Persisting challenges

4.137. Within PEDs, authority and decision making powers seems to be still concentrated at the top level of management. There seems to be no clear division of labour or devolution of authority to lower levels within provinces.

4.138. On average PEDs and DPWs are understaffed in both quantitative and qualitative terms. This makes effective delivery a critical challenge. For some provinces a shortage of critical skills namely, engineers, architects and a high level construction companies in the open market is a critical constraint to effective delivery.

4.139. Some aspects of the broader national environment also constrain effective delivery. Most provinces experience a shortage of construction materials, exacerbated by the 2010 World Cup construction boom. This is another constraint to effective delivery.

4.140. While the IDIP is strengthening the implementation capacity of PEDs and PPWDs, substantial attention still needs to be paid to planning for implementation. Systems for integrated and collaborative planning still need to be developed. Poor implementation planning remains a key cause of implementation delays. Implementation delays routinely lead to delays in disbursements, and sometimes, to the loss of funds that were supposed to be used within the financial year. On the other hand, PEDs often note the slow implementation pace of PPWDs which leads to poor delivery of planned infrastructure. In some instances, albeit very rare, PPWDs are reputed for substantial implementation delays, but also for delivering less output at a much higher cost than PEDs.

4.141. Procurement planning is another weak point in the delivery system. In some cases, provincial officials did not seem to make a distinction between overall implementation planning and procurement planning. With this lack of clarity, it is difficult to coordinate implementation plans with procurement and disbursement plans. Other than weak planning capacity, procurement actions undertaken by diverse units are not well coordinated. Because of lack of coordination, critical inputs—classrooms, furniture, books—are not always delivered at the same time as they should. Partly because of weak procurement planning, procurement actions are not closely monitored. In some cases, implementation plans identify ‘completion dates’ as the ‘year’ not even the specific month when work will be completed.

4.142. The DBE also has weak capacity for strategic planning and medium term programming. Capacity for timely collection of accurate data, data analysis and sustained monitoring of implementation progress is also weak.

Policy Statement

4.143. *During the 2010-2014 strategic plan period, the DBE will intensify the devolution of responsibility, authority and accountability for the provision of school infrastructure to the lowest feasible level in the education system which is the school. The definition of functions to be devolved will be explicitly and uniformly specified based on best practices for effective delivery and not on current capacities of levels of devolution. A capacity development programme will be developed and implemented to ensure a rollout of the development process in accordance with the plan.*

4.144. *The DBE will integrate all educational infrastructure delivery functions which are currently carried out in different agencies and unify responsibility and accountability for them. All infrastructure provision operations managed and coordinated under Treasury, other than the actual provision of funds, should be moved to the DBE. Equally, planning and management of infrastructure operations currently jointly managed by the DPWs and DBE should be vested with the DBE. At provincial level, the coordination and management of all operations should be in the hands of the PEDs.*

4.145. *A comprehensive capacity development programme should be developed and immediately implemented to enable the DBE and PEDs to effectively and efficiently deliver key elements of the teaching and learning environment.*

4.146. *The DBE and PEDs should retain full authority to appoint agents to augment their delivery capacity for key elements of the teaching and learning environment. Such agents should be under the full supervision of the DBE and PEDs.*

4.147. *For specific purpose, the DBE may centrally create a unit to manage the delivery of key elements of the teaching and learning environment. Such a unit should centrally report to the National and Provincial Departments of Education. The unit will be dissolved at the end of the specific purpose period and full responsibility for delivery will revert fully to the DBE and PEDs.*

Key policy actions

4.148. In order to ensure the success of the devolution plan, the DBE and PEDs should undertake their respective functional analyses. The results should be used to guide the devolution plan.

4.149. As part of the preparation for policy implementation, a comprehensive capacity analysis covering—human resources, organisational, institutional and national capacities—should be undertaken. The results should be used to develop a comprehensive capacity development programme that will underpin policy implementation.

Benefits

4.150. An expected benefit in the proposed policy is; improved capacity in PEDs, clear accountable unit for infrastructure and maximised efficiency, this will also save cost and the time taken to deliver projects

4.151. An optimal division of labour has the following characteristics: (a) it places work as close as operationally possible to those affected by it – the clients or beneficiaries; (b) it places decision-making as close as operationally possible to where the information needed is to be found; (c) it avoids unnecessary fragmentation and retains unitary accountability as far as possible; and (d) it seeks to maximise efficiency.

Risks and risk mitigation

The key risk of devolution of functions and unitary accountability is the capacity of infrastructure units at all levels of management at DBE and PEDs.

4.152. To mitigate the risk DBE will design and implement capacity building programmes for itself and for PEDs.

Policy Area # 8: Systematised procurement management and procedures for the sector

4.153. In most cases, procurement is the last consideration of sector policies, strategies and programmes. Yet in real terms, procurement ought to be an integral part of these instruments. Procurement policies and systems of a country reflect broader national policies and strategies for development. For instance the South Africa procurement system supports the broader national Black Economic Empowerment (BEE) policy and Preferential Procurement Policy Framework Act (PPPFA). It also supports the overall national strategy for promoting transparency, accountability for use of public resources, and good governance.

4.154. Specific to programmes, procurement ought to be an integral part of programme design and implementation. Procurement plans support and give effect to implementation plans. Procurement plans also drive disbursements. Appropriate procurement methods can improve the quality of goods and services rendered; technical, time, and resource efficiency in the provision of goods and services; equity in the benefits accrued from procurement processes; and consolidation of national policies and values. The policy framework therefore integrates procurement at this early stage in recognition of its importance.

Key challenges addressed by this policy

4.155. The main challenge is that the education, training and skills development sector seems not to have a systematic procurement management system and procedures. This is in spite of importance of procurement in national and sector policies, strategies and programmes. Without a system that can be followed by the sector, there are bound to be inconsistencies that are not necessarily constructive. Without a system there are real risks of no attaining the benefits of a robust procurement system outlined above. These inconsistencies and the risks they pose to key national policies is what gives rise to the need for a policy(ies) that can regularise practices and support broader national policies.

Prior and ongoing efforts

4.156. Notable efforts to improve procurement are at the national level. Through the agency of the National Treasury, government has instituted progressive procurement reforms starting just one year after democratic rule, in 1995. These reforms are underpinned by two broad principles: good governance and equal opportunity. Adopted measures are relevant to procurement policies and institutions concerned with procurement. They focused on the attainment of: quality of goods and services; time and resource efficiency in procurement; responsiveness / relevance to national needs; recognition of national values; improved equity in procurement processes; and credibility and transparency. A number of legal frameworks have been instituted to enforce adopted reforms; including the Public Finance Management Act (PFMA), the Preferential Procurement Policy Framework Act (PPPFA) and Black Economic Empowerment (BEE).

4.157. Reforms were underpinned by substantial analyses of the public procurement system. For instance in 2001/2002 the government undertook a Country Procurement Assessment Review (CPAR) with technical support from the World Bank. This review revealed a number of deficiencies that needed to be addressed in order to strengthen governance and to improve the interpretation and implementation of the PPPFA and regulations. The following actions were recommended:

4.157.1. For uniformity and equity, announce a single national legislative framework in terms of Section 76(4) (c) of the PFMA to guide uniformity in procurement reform initiatives in the different spheres of government.

4.157.2. Replace the outdated and inefficient procurement and provisioning practices in government with a supply chain management function and a competitive system for the appointment of consultants fully integrated with the financial management processes.

4.157.3. Prescribe minimum norms and standards to promote uniformity in bid documentation, advertising, receipt and adjudication procedures.

4.157.4. Monitor value for money performance.

Key achievements

4.158. In 2003, the government adopted a *strategy to promote uniformity in the procurement reform processes*. A range of actions outlined below were initiated by and are at differing stages of implementation:

4.159. *An integrated supply chain management function is been introduced:* In September 2003, Cabinet adopted a Supply Chain Management (SCM) policy to replace the inadequate procurement and provisioning practices across government. The observed inadequacies were in the areas of (i) procurement, (ii) contract management, (iii) inventory/asset control, and (iv) obsolescence planning. The new SCM function is an integral part of financial management and conforms to international best practices. The new arrangements are expected to promote uniformity in SCM processes and in interpretation of government's

preferential procurement legislation and policies. These arrangements mean that responsibility and accountability for SCM-related functions will be devolved to accounting officers/authorities.

4.160. The Supply Chain Management system provides for procurement that is fair, equitable, transparent, competitive and cost-effective. It has introduced internationally accepted principles of best practice. The SCM system is designed to achieve effective, efficient and innovative processes for (a) demand planning, (b) procurement (including strategic sourcing), (c) contract management, (d) inventory/asset control, and (e) obsolescence/disposal planning.

4.161. A *national legislative framework is introduced* to enforce minimum norms and standards and uniformity in respect of SCM practices and interpretation of policy objectives. The framework established the policy parameters for the repealing of the existing Tender Board legislation and prescribed minimum norms and standards for SCM practices in government. It also empowered the National Treasury to arrange for transversally used "term-contracts" where it is beneficial from a value for money perspective and/or achieves government's preferential procurement policy objectives. Minimum reporting requirements were established for Accounting Officers/authorities and the National Treasury to monitor compliance.

4.162. This uniformity in SCM practices is to be promoted, among others steps, through uniformity in bid and contract documentation and options and standards of bid policies and procedures. The National Treasury is to issue such practice notes. In turn, Provincial Treasurers and Municipal Managers will issue further practice notes to guide the more detailed implementation of SCM functions.

4.163. These policies apply to all national and provincial departments, constitutional institutions, public entities and all school governing bodies. The system empowers Accounting Officers to manage their departments and accept full responsibility and accountability for all expenditures incurred by their departments. At provincial level, the various Tender Board Acts will also be ultimately repealed and the various provincial Tender Boards will be dismantled. In some provinces this phased process has already commenced and certain provincial Tender Boards have already been dismantled.

4.164. *Implementation Strategy is developed:* The divide between the then current procurement and provisioning practices in government and the new integrated SCM function necessitated a phased implementation approach. To prepare departments for the new concepts, tender boards, in liaison with the relevant treasuries, began to significantly delegate their authority to procurement departments so that the latter can begin to build capacity. In this endeavour, Accounting Officers/authorities are to be supported by their relevant treasuries. Capacity building would include the establishment of SCM Units, the establishment of clear lines of authority and accountability and performance criteria, quicker and more efficient sourcing and better asset and inventory management.

4.165. *Capacity building in Procurement is planned:* It is the responsibility of every Accounting Officer/ authority to ensure that their SCM personnel are adequately trained. The National Treasury will facilitate the development of appropriate training material in

conjunction with (South African Management Development Institute) SAMDI, Institute for Public Finance and Auditing (IPFA) and others to assist Accounting Officers/authorities in the training of their personnel.

4.166. *Accountability and reporting is defined* to ensure that individuals and organisations are answerable for their plans, actions and outcomes. Openness and transparency in administration, by external scrutiny through public reporting, is an essential element of accountability. Within the procurement framework, the heads of departments are accountable to their ministers for the overall management of procurement activities with suitable delegation of authority within the department.

4.167. *The 2003 procurement guidelines stress that proper and successful government procurement rests upon core principles of behaviour - the Five Pillars of Procurement: (a) Value for Money, (b) Open and Effective Competition, (c) Ethics and Fair Dealing, (d) Accountability and Reporting, and (e) Equity. The Guidelines prescribe minimum standards that are to be observed. The Guidelines are to be supplemented by individual Accounting Officers' Procurement Procedures.*

Persisting challenges

4.168. To date, and in spite of the national progress outlined above, the sector seems to not have systematically interpreted the national procurement system and translated it into a sector-specific system. Mainly because of an unclear sector-specific procurement system the organization and management of procurement differs across and within provinces. Roles, responsibilities and accountability for procurement are fragmented and unclear. There are inconsistencies in the extent of the devolution of authority for procurement. Procurement authority is not always devolved to the appropriate operational level. Where there is devolution, identical operational levels are accorded different levels of authority with respect to identical functions. For instance non-section 21 schools have very limited authority for procurement with a threshold of about R 2000. Yet the same schools raise hundreds of thousands of Rands with which they have unlimited authority to procure. This means that either the capacity of these schools to procure is underrated or their accountability for own-source revenues is not taken seriously. Either way, there are inexplicable inconsistencies in the level of procurement authority devolved to these schools. Procurement planning is weak to non-existence. Most visited provinces did not seem to distinguish procurement plans from implementation plans. Partly because of poor procurement planning, implementation and disbursements have not always matched the needs. Absorptive capacity for allocated resources has been low, despite dire needs. As noted, the IDIP programme seeks to remedy this situation, but even that DBE does not give adequate attention to procurement planning and procurement management.

Policy statement

4.169. *Effective from 2010-2014 strategic plan period, the procurement of all elements of the physical teaching and learning environment will comply with the standardised sector-specific procurement procedures. These procedures will be developed by the DBE, in compliance with the overall national procurement policy and procedures. All provinces will comply with set sector-specific procedures.*

4.170. *Effective from 2010-2014 strategic plan period—responsibility and accountability for the actual execution of procurement procedures will be with PEDs and not with a multiplicity of agencies as it is currently the case.*

4.171. *Effective from 2010-2014 strategic plan period authority for procurement execution will be devolved to the lowest appropriate operational level.*

Key policy actions

4.172. Standardisation of a sector-specific procurement system will require the following key actions:

4.173. *Interpretation of national procurement policy and procedures and translating them into a sector –specific system and procedures.* By and large South Africa has developed procurement policies and procedures. What remains is for sectors to translate existing policies and procedures into what suits the sector. In so doing, the DBE should remain in compliance with the national system, but does not have to at all elements of the system. For instance, the DBE may feel that certain procurement methods allowed in the national systems are suitable for its purposes but not others. It is also possible that the DBE may find certain methods not provided for in the national systems appropriate for its purposes. An example may be the use of International Competitive Bidding (ICB) as a method that could improve efficiency and cost-effectiveness through more open competition. In cases where the DBE digresses from the national system, no matter how slightly, clearance will be sought from the National Treasury as the authority responsible for the national system.

4.174. *Develop procurement guidelines and manuals:* For its effect, the sector-specific system should be backed up by clear guidelines and manuals. These will be developed by the DBE. IDIP tools will need to be customised to reflect educational policy and norms and standards requirements.

4.175. *Accord the PEDs sole responsibility and accountability for procurement.* Currently, the procurement of works particularly is fragmented over a range of agencies. This fragmentation weakens accountability for a range of core function like construction supervision and contract management. On average, most of procurement functions are discharged by PEDs through the unit of the SCMO. However there are wide variations on who takes responsibility and accountability for procurement of work. The variation ranges from one extreme where the PEDs do all procurement in-house to outsourcing all procurement to a range of agencies ranging from the Department of Public Works (DPWs) to independent consultants. In some provinces, the procurement of works is done by PEDs but not through the SCMO. Other provinces delegate the procurement of works to the DPWs. Even then, the actual functions are still split. The DPWs does all the processing of the works contracts using its departmental staff. Thus, DPWs acts as a unit of the PEDs. However, the contract with the selected contractor is not signed by DPWs; it is signed by the PEDs. In this arrangement, the PEDs are responsible for (a) approving and making all payments, and (b) approving all variations and additions to the contract. In this way, the PEDs retains full control of (i) contract content, (ii) contract payments, while leaving most of the actual

“contract management” function to DPWs (iii) PEDs do some limited construction supervision but it is not clear how the contractor reports to supervisors from PEDs and DPWs. The net effect is that the line of accountability for construction supervision gets blurred.

4.176. *Strengthen procurement planning and management capacity of PEDs.* PEDs will not be able to take sole responsibility and accountability for procurement without substantial capacity development. Specific areas where capacity needs to be developed includes: (i) procurement planning; (ii) coordination of procurement planning with implementation planning, disbursement planning, and monitoring and evaluation; (iii) contract management and construction supervision; and (iv) cost management and cost control.

4.177. *Strengthen procurement management capacity at all operational levels where procurement takes place:* It will be impossible to devolve procurement authority to lower levels unless those levels are technically empowered to exercise that authority. As such, capacity will have to strengthen at the lower levels and in a manner commensurate with their levels of authority.

4.178. *Strengthen capacity for financial management:* Procurement releases funds, and thus demands strengthened financial management systems. The devolution of procurement authority will therefore necessarily demand devolution of financial management. Thus capacity needs to be developed in this area.

4.179. *Streamline financial management systems:* Effective financial management demands effective and streamlined systems.

4.180. *Determine and consistently apply thresholds for lower levels of these systems:* Currently, the thresholds for non-section 21 schools are counterintuitive. On the one hand, they have a limit of R2000. Whereas on the other hand, they have no limits. The contradictions of this practice have been referred to the above need reconciliation.

Benefits

4.181. Expected benefits of clear procurement systems and procedures are all the benefits of effective procurement policy, planning and procedures outlined above—quality of service, time, technical and resource efficiency, timeliness of service, value for money, accountability for public resources, fair opportunities, etc. Improved procurement capacity is also expected to facilitate implementation and disbursement.

Risks and risk mitigation

4.182. The proposed policy may lead to turf battles where other departments like National Treasury, and DPWs feels that the DBE is encroaching in their space. Provinces may not like the centrist approach where their procurement system, guidelines, manuals and procedures are centrally determined. PEDs may be reluctant to devolve procurement authority to lower levels as this may seem to be the erosion of their power and control.

4.183. To mitigate this risk, consultation and higher levels engagement will be necessary to make feasible the implied reorganisation of roles and functions across different government departments.
