Education Roadmap

Focus on schooling system

November 2008

Roadmap process

Short Term: Diagnose current status and future challenges. Propose interventions, particularly to improve on what already exists.

Phase 1
Diagnose the status of the
Education schooling system

Phase 2 Identify reasons for the current education outcomes Phase 3
Consolidate
findings to make
recommendations
around short term
interventions

Phase 4
Facilitate the implementation of the recommendations



Long Term: Support process of implementation, and further social dialogue on relevant new system design interventions.

Participation

 SADTU, ANC NEC sub-committee on Health and Education, Minister of Education, National DoE, provincial departments, DBSA, School of Education (Wits), CEPD, EPU, National Treasury, academics, training institutions

Consultation and analytical process

- Planning meeting:
 - 25 July 2008
- Research undertaken
- Stakeholder Sub-committees:
 - 22 August 2008
- Technical sub-committees:
 - 19 September 2008
 - 20 October 2008
- Consultative meeting:
 - 7 November 2008

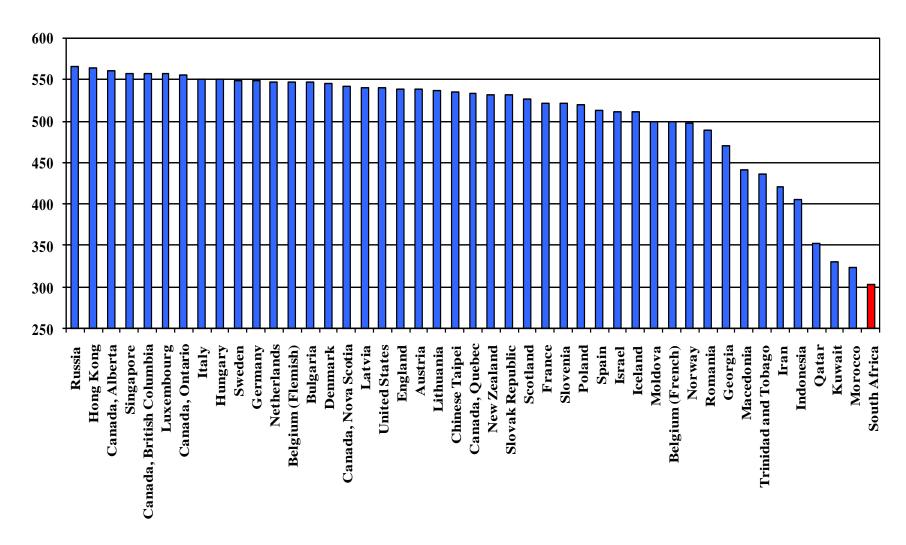
Part one

SOUTH AFRICA – WHAT'S BEEN HAPPENING?

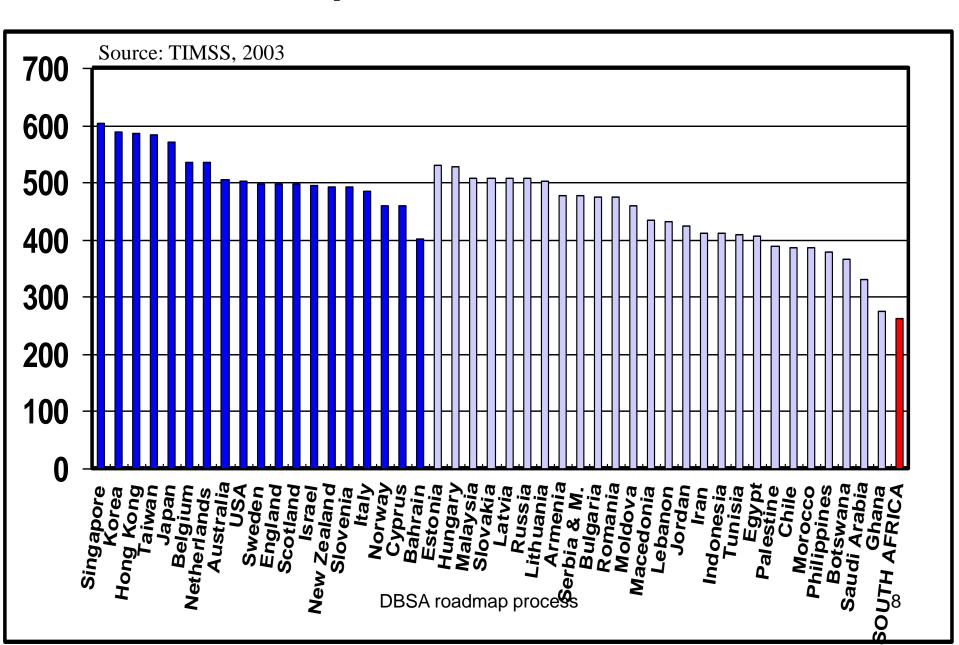
Important achievements since 1994

- Access to primary and secondary schooling improved to near universal enrolment. The participation rate among girls is also among the highest in the world.
- Numbers of pupils that have progressed to higher levels of schooling have increased significantly from 1994
- Access to school education was further enhanced by exempting poor learners from paying school fees and outlawing discrimination against, and exclusion of, learners who cannot afford school fees
- Matriculation pass rate increased from 58% in 1994 to 65% in 2007
- Pupil-to-teacher ratios have improved from 43:1 (1996)
 to 32:1 (2006)

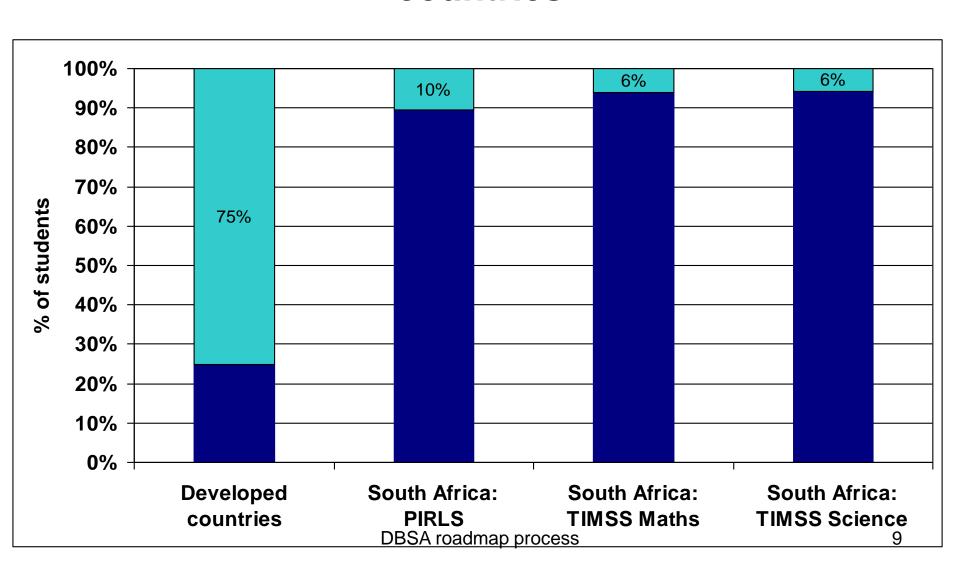
The problem is education quality, as demonstrated by SA performance in literacy...



... and performance in maths



Implications of results: Only top 6%-10% of SA students at level of top 75% of developed countries



Implications of results: skills shortage

- Approx. 1/40 of the children that started school in 1995 passed maths higher grade in matric
- 93% of maths passes came from 21% of schools
- Poor maths results affects key economic skills, e.g. engineering
 - South Africa has approximately 30 engineers per 100,000 people compared to 255 in the US/ 340 in Australia/...
- Skills shortage a binding constraint on growth and employment creation

Headed our way: Class of 2010

- When class of 2010 (now in grade 10) was in grade 3 in 2001, the average literacy score was 30%
- In 2007, average score in grade 3 test was 36%, but only 15% of children passed both numeracy and literacy
- Raises serious concerns regarding teaching and learning (and 'OBE') in primary schools

Part two

WHAT ARE THE CURRENT INTERVENTIONS?

ECD: expanding but with serious quality problems

- Development during formative years and socio-economic status is critical
- The target set out in Education White Paper is to reach full coverage of grade R (age 4-5) by 2010, with 85 % of provision located in public primary schools and 15 % through community sites
- Target population (100%) is 990 000. Currently coverage of 70%:
 - 424 000 grade R learners in public ordinary schools
 - 17 000 grade R learners in independent schools
 - 290 000 learners in community centres
- Cost of R686 per child per year, and planned budgets, "hold significant quality risks" (OECD, 2008)

FET: enrolments increased but weaker links to economy

- While 'unitech' enrolments have grown from 57,000 in 1988 to 400,000 in 2007, enrolment and the rate of graduation has been declining in crucial fields such as engineering
- For many years there was confusion over the status of apprenticeship training
- From 2001-2006, SA producing on average 5,600 artisans per annum compared to need for 12,500
- Previously FETs (technical colleges) worked in tandem with employers as vocational training, and employers sponsored students. Link has weakened since 1990s and a graduate from an FET college has about a 30% chance of getting a job

HEI: More students and recapitalisation, but student readiness a concern

- Early focus post-1994 on massification of HEIs due to:
 - 75% participation of white students in 18-25 age group
 - 5% participation rate for black students
- Headcount increased from 473,000 in 1994 to 737,000 in 2005
- Since 2004, 30% of students receiving financial aid from State
- HEIs reduced from 36 to 23
- Focus on increased capital investment in historically black institutions and more effective financial management
- However drop out rates remain high (50% over first 2 years), and only 22% of students finish three-year degree in three years.
- More focus on academic-support programmes to compensate for schooling deficiencies

Key priorities of DoE in 2008 (1)

- The ongoing implementation of the National Policy Framework for Teacher Education and Development in South Africa
- The ongoing implementation of Revised National Curriculum Statement
- Teacher and principal training
- Teacher-training bursaries to encourage new entrants to join the profession
- Growing the number of Dinaledi high schools, currently 488 such schools prioritise mathematics, science and literacy

Key priorities of DoE in 2008 (2)

- The roll out of information management systems (EMIS, DEMIS, LURITS, Education HR MIS)
- The roll out of Integrated Quality Management System
- The intention to supply two computers per school (and/or one laptop-one teacher) to allow for the electronic distribution of information
- The roll-out of the Thutong information electronic portal which is intended to support the electronic distribution of, for example, learner support material and professional development materials
- Improvements to school infrastructure
- Literacy and numeracy in primary schools

Part three

WHAT FUNDAMENTAL CHALLENGES REMAIN?

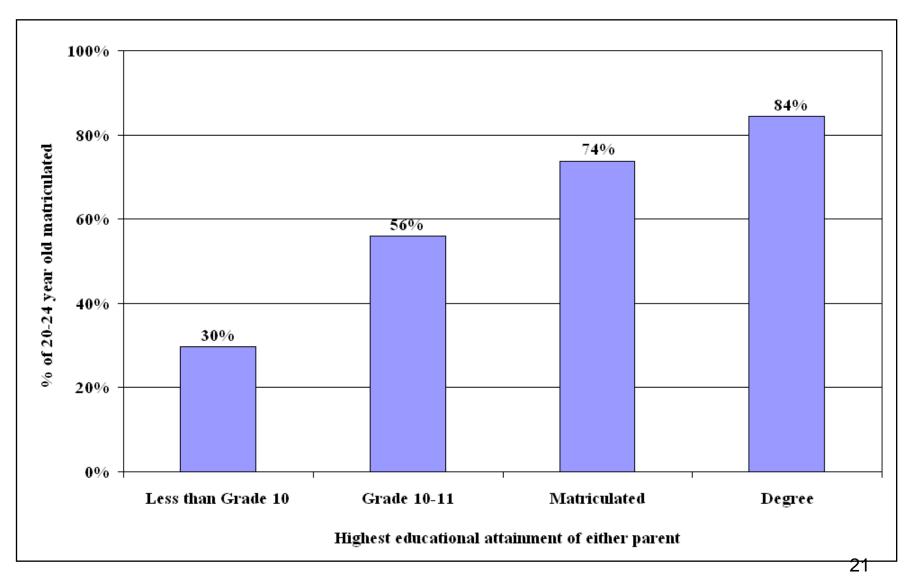
Challenge 1

SOCIO-ECONOMIC STATUS

Social disadvantage

- Parent education & socio-economic status strong predictors of educational outcomes
 - thus limiting inter-generational social mobility
- Power differential between poor parents and teachers
 - limiting accountability and functioning of SGBs
- Poor parents face information vacuum
 - Due to absence of external exams prior to grade 12 cannot judge how well their children are learning
- Significant proportion of learners are single or double orphans, victims of violence and face other traumas affecting learning

Social disadvantage is reproduced

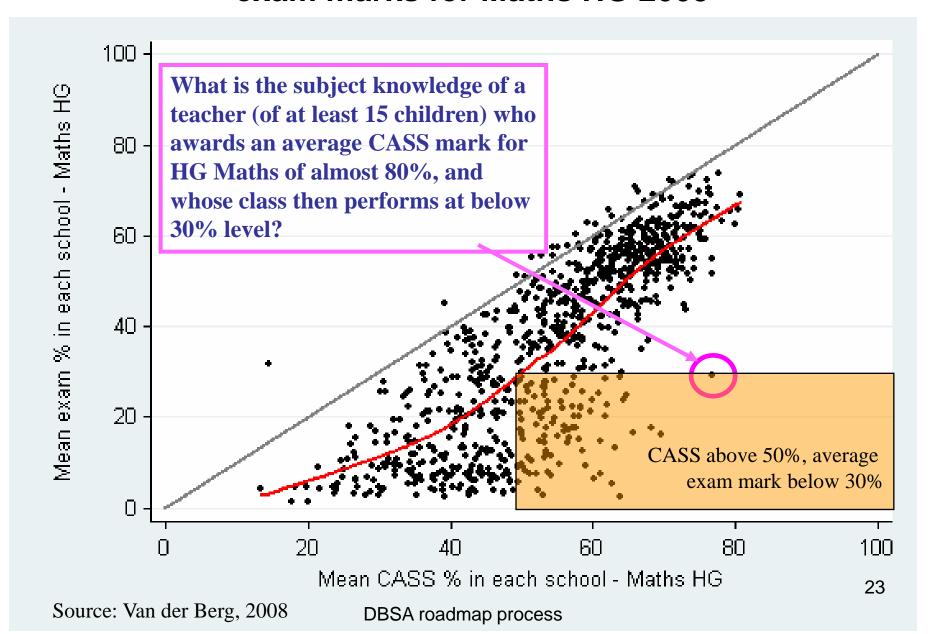


Source: Van der Berg, 2008

Challenge 2

TEACHERS

School-level continuous assessment (CASS) compared to exam marks for Maths HG 2005



Teacher knowledge

- A baseline conducted in 2004 assessed the knowledge of a sample of Grade 3 teachers drawn from 24 primary schools selected at random. Literacy and a mathematics tests (Grade 6 learner level) were administered.
- The average score on the Language test for 23 teachers was 13 correct responses out of 24 items (55%).
- The majority of teachers scored between 7 and 12 marks out of a possible 24 (29% 50%).
- (Source: Taylor et al, 51: 2008. Office of the President. 15 year review input paper)

Teaching practices

- "One of the most disturbing findings was that, although books were available for both language and maths in all but two of the schools, no books were seen being used in 43% of language classes and 69% of maths classes."
- "The most common form of reading in these classes consisted of teachers writing 3 or 4 sentences on the board and then leading the reading of these, with children following in chorus."
- "When faced with these practices, it is no wonder that South African children are not learning to read."
- "Similarly, an examination of the books of these children revealed that in the majority of classes children engage in writing exercises no more than once a week. What little writing is done consists predominantly of exercises composed of isolated words; sentences are seldom seen, while longer passages are virtually non-existent.
- (Source: Taylor et al, 49: 2008. Office of the President. 15 year review input paper)

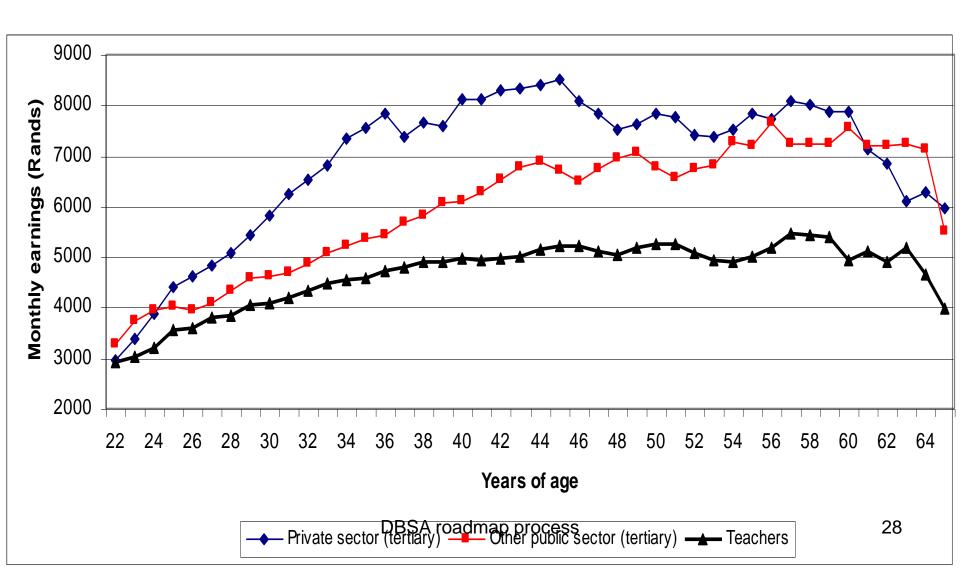
Quality of teaching is central to crisis

- 386,000 teachers, with most trained pre-1994
- Post-1996, voluntary severance packages led to many skilled teachers leaving the profession
- Subject knowledge problem is more serious issue than under-qualifications
- Some teachers may be encouraging pupils to take lower-level (easier to teach) subjects
- Effective teacher development is critical

Teacher numbers can become a problem, too

- There is likely to be a shortage of teachers in the future based on the anticipated effects of:
 - the impact of HIV and Aids on educators
 - fewer candidates entering the teaching profession
 - attrition rates among educators as a result of factors other than HIV and AIDS
- With change from teacher training colleges (often substandard) to universities, the number of teacher graduates has fallen from 70,000 in 1994 to 6,000 in 2006 (one-third of whom do not intend to teach in SA)
- Teacher attrition rate is currently estimated at 17,000 and 20,000 teachers lost to the system each year.

Is it rational for a quality teacher to go into teaching? (monthly pay of teachers, 2000 prices)



Beginning to focus on performance and evaluation

- Negative experience of inspection in African schools during Apartheid
- Post-1994 teacher appraisal effectively absent
- The Integrated Quality Management System began to be introduced into schools in 2004.
 - Complexity of the process for 1% salary increment
- In 2008, Occupational Specific Dispensation (OSD) introduced: reward teachers for "good" and "outstanding" performance.
 - The OSD agreement introduces performance agreements for schoolbased managers (Principals and Deputy Principals) and office-based educators.

Challenge 3

DYSFUNCTIONAL SCHOOLS

Middle- and working-class exodus from dysfunctional schools

- Teachers in township schools spend 3.5 hours per day on instruction, compared to 6 hours per day in suburban schools
- Much of time is spent on:
 - Form filling (28%)
 - Absenteeism
 - disorganisation
 - Failure to enroll students in time
 - Logistical problems in the delivery of books
 - Lack of discipline among pupils
 - External interruptions
 - Inactivity
- In 2007, 77% of children in SA schools did not feel safe in the classroom
- Parents, at great cost, sending their children from township to schools in suburbs

Challenge 4

'OBE' IN SCHOOLS WITHOUT CAPACITY

'OBE' in primary schools

- OBE revised: Revised National Curriculum Statement
- Requires teachers to have considerable subject knowledge and skills and schools to have a degree of resources
- Problem is exacerbated as most pupils not being taught in their home language, so more difficult for them
- OECD, 2008: "[NCS is] a fine vision, but in the reality of the average South African school, it does not hold true."
- OECD: "In early grades, less is more."
 - Foundation for Learning Campaign for primary schools

NDoE: Foundation for Learning campaign

- Strategy launched in March 2008 In response to poor learning outcomes achieved by South African learners in national and international learner assessment tasks (grades R to 6)
- The projected measure of the campaign is to increase average learner performance in languages and mathematics to no less than 50% by 2011
- Primary schools will have 30 minutes of reading and 10 minutes of mental mathematics, as well as 20 minutes of written mathematics every day
- Learner assessment will occur on a regular basis with standardised assessment tasks provided by the Department of Education.

Challenge 5

FINANCIAL RESOURCES

Education funding

- Real spending reduction between 1996-2002, then 18% real increase to 2007
- While education spending is 5% of GDP, this is below UNESCO benchmark of 6%
- Considerable inefficiencies e.g. textbook procurement, feeding schemes, scholar transport
 - Grade 10-12 textbooks now (2008) being procured through centralised process, though other inefficiencies persist
- Proportion of provincial budgets expended on education has fallen DBSA roadmap process

Infrastructure backlog

- National Education Infrastructure Management System on state of schools:
 - 42% overcrowded
 - 3,152 without water
 - 1,532 without toilets
 - 4,297 without electricity
 - 79% without libraries
 - 68% without computers
 - 60% without laboratories
- NEIMS estimates R153bn capex backlog + R30bn maintenance VS R18bn budgeted over next 3 years

School fees and no-fee schools

- The poor are currently exempt from paying fees
- Poorest schools get disproportionate slice of nonpersonnel funding
- Poorest two quintiles of schools are "no fee schools", i.e. 40% of schools nationally, ranging from 56% in the poor Eastern Cape to 14% in the richer Western Cape.
- New policy decision to increase no-fee schools from poorest 40% to poorest 60% (quintile 3)
- Schools that are prohibited from charging fees must receive adequate compensatory transfers from government and in good time, or else some schools will go into decline

Challenge 6

RESPONSIBILITIES AND ACCOUNTABILITIES

Insufficient national-provincial alignment

- National government has exclusive legislative responsibility for tertiary education, and concurrent responsibility with the provinces for all other levels of education.
- National government, working with provinces, formulates national policy
- Provincial governments implement nationally determined policy
- Provinces not obliged to observe national priorities, particularly regarding allocation of financial resources

Insufficient district- and SGB-focus on learning and teaching

- District offices responsible for managing the financial and material resources of schools (ex 'Section 21' schools)
- Significant powers to School Governing Bodies
 - General lack of capacity at most SGBs
 - Actual focus on finances, not learning and teaching

Part four

KEY INTERVENTIONS NEEDED

In-school

- Implement 'in class, on time, teaching'. Also zerotolerance for anti-social behavior by teachers e.g. drunkenness, sexual assault, etc.
- In primary schools, prioritise:
 - Foundation for Learning Campaign
 - Use of textbooks
- Scale-up practical management courses for principals, deputies, HODs and district supervisors
- Clarify and complete filling all teacher vacancies (per class size and per subject area)

Support to schools (1)

- Stabilise, reinforce and accelerate schools that are "working" (achieving relatively good results)
 - Delegations empowering principals to focus on teaching and learning
 - Allocate infrastructure funding as incentive for schools that achieve biggest improvements in student results (grant for staffrooms, laboratories, etc.)
- Strengthen education districts beginning with deployment of competent management teams to selected districts to assist dysfunctional schools
 - Support Principal/ school management teams
 - Prioritise implementation of in-class, on time, teaching
 - Share districts resources (e.g. remediation classes) for learning and teaching
 - Provide social workers for children
 - Extramural school activities (e.g. sport, chess, dance, etc.)
- Improve capacity and define roles, functions and responsibilities of districts
- Interim measure: while schooling being 'fixed' what do we do with high-potential children already in the system (e.g. grade 8 in 2009)?

Support to schools (2)

- Review 'OBE' and, if needs be, issue its "death certificate"
- Shift national funding to conditional grants
- Revise regulations to enable national procurement of textbooks, feeding schemes, and scholar transport
- Regular external testing of learners in primary and secondary school
- Finalise and implement a decisive approach to teacher evaluation

Societal

- Scale-up and resource early childhood interventions
- Conduct regulatory impact assessments on all future design changes to education (beginning with extension of no-fee school programme to quintile 3 schools).
- Teacher unions to be given a formal and funded role in supporting teacher development
- Council of Education Ministers to review and agree to performance inputs and output targets for national and provincial government
- Create basis for social compact on education, through establishing National Education Consultative Forum, with formal roles (including reviewing performance targets)

Concluding remarks

- SA's skills agenda needs quality education
- Quality education requires working schools and quality teaching
- Proposals based primarily on strengthening/ refining what already exists rather than system redesign
- Complexity requires social compact (sufficient consensus), public participation, and ongoing evaluation
- Prerequisites for success:
 - Narrow gap between desired policy outcomes and actual implementation
 - Leadership role of teacher unions in teacher development and quality education

10-point programme

A. In-school

- 1. Teachers to be in-class, on time, teaching. Teachers to also be required to use textbooks in class.
- 2. Focus efforts on improving the quality of early childhood education and primary schools, including implementing the 'Foundations for Learning' Campaign emphasizing the promotion of language and numeracy.
- 3. Conduct external tests for all grade 3 and grade 6 learners every year, and provide the results to parents.

In-school (contd)

- 4. Ensure effective evaluation of all teachers based on extent to which learner performances *improve*, with results influencing occupationally specific dispensation pay for teachers.
- 5. Enhance recruitment of quality teachers and strengthen teacher development
 - Offer bursaries to attract quality student in-take into teacher training institution and offer student loan repayments to attract young graduates into teacher contracts.
 - Enhance pre-service and in-service teacher training, including through better coordination and resourcing.
 - Ensure that teacher unions have a formal and funded role in teacher development.

B. Support to school

- 6. Strengthen management capacity to ensure working districts and schools. This entails bringing in management capacity from the private sector, civil society and elsewhere in the public sector.
 - Phase in a process of measurable improvements through targeting efforts at selected education districts and dysfunctional schools.
 - Use of infrastructure budgets as an incentive for schools that deliver improved teaching and learning.
- Increase the use of ICT in education, including audiovisual teaching materials in the classroom to supplement teaching and demonstrate quality teaching to learners and educators.
- 8. Improve national-provincial alignment and efficiency of education expenditure, through procuring textbooks nationally and allocating resources to improve district capacity. In this regard, the use of conditional grants is an important tool to ensure alignment.

C. Societal

- Develop a social compact for quality education. This will include a National Consultative Forum dedicated to clarifying the 'non-negotiables' and performance targets for key stakeholders, and the monitoring thereof.
 - Mobilisation of communities at all levels should be encouraged to raise awareness and participation in education issues. Examples include graduates assisting their former/ dysfunctional schools to assist, corporate social investment, party branch campaigns to clean up schools, and supporting food gardens, and encouraging young graduates to enter teaching ("Teach SA").
- 10. Implement poverty combating measures that improve the environment for learning and teaching, such as a nutrition programme (cross-cutting programme with health), basic infrastructure for schools, and social support for children.

Thank you