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IN THIS ISSUE

An overview of selected schooling indicators 2001 - 2010

Monica Bot

pg 1

Strengthening early literacy and numeracy teaching and learning

Adele Gordon
Monica Mawoyo
Carla Pereira

pg 16

South Africa's further education and training college sector at a glance

Bina Akoobhai
Anthony Gewer
Jennifer Shindler

pg 24

Tables & figures index

pg 34

Editorial

EduSource Data News, a newsletter that distributed information and data on South African education and provided for commissioned research, was published by The Education Foundation Trust from 1992 until 2005. The newsletter was distributed to a broad range of individuals and organisations that included the educational community, donor and corporate social investment agencies, and the private sector.

Believing that there is still a pressing need for easy access to information relating to critical issues in education, JET Education Services and the newly established EduSource Trust have joined forces to revive this publication. The people responsible for the production of the revived EduSource Data News are: Monica Bot, who initiated, co-edited, co-wrote and co-produced the original EduSource Data News; her fellow trustees, Adele Gordon and Monica Mawoyo; and Jennifer Shindler of JET, who also worked on the original publication.

The plan is to publish three to four issues of EduSource Data News a year. Content will cover annual reviews of key outcomes in provinces and across South Africa; commissioned studies and reviews relating to the status of educational provision at all levels; set themes; and sector analyses. Information will be derived from public media, government and academic publications and research, in-depth interviews with South African education officials on particular topics; and comparative information from Africa and the international education community.

In this first issue we provide an update of developments in basic education covering access, progression and performance of the schooling system; an in-depth look at the Western Cape Education Department's programme to improve literacy and numeracy attainment in the foundation phase; and an overview of the further education and training college system.

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AN OVERVIEW OF SELECTED SCHOOLING INDICATORS, 2001-2010

Monica Bot

INTRODUCTION

The last overview of macro indicators in education published in EduSource Data News covered the period 1991 to 2001, and it was decided to start off the new series with an overview taking us up to 2010, subject to data availability. The focus is on data that reflect access, progression, performance and quality of the education system, as these are key indicators of whether our schooling

system is improving. These indicators are also reflected in the Department of Basic Education's Action Plan to 2014, which was presented to the Portfolio Committee late in 2010. The Action Plan comprises specific goals which the Department aims to achieve by 2014, and lists specific targets in terms of improved access, progression and learner achievement, and ways to achieve these.

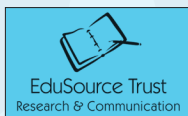


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TABLE 1

ATTENDANCE AT ECD SITES, 2000 & 2009

	2000		2009		% CHANGE
	No. ATTENDING	% OF POPULATION ELIGIBLE FOR EDC	No. OF 0-4 YEAR OLDS	% OF POPULATION AGED BETWEEN 0 AND 4	
African	637 280	10.3%	1 240 000	29.4%	95%
Coloured	89 458	14.1%	89 000	21.6%	-0.5%
Indian	18 552	14.6%	28 000	29.2%	51%
White	116 770	30.0%	132 000	53.4%	13%
Total	862 060	N/a	1 488 000	29.9%	73%

SOURCE : SOUTH AFRICAN INSTITUTE OF RACE RELATIONS, 2010: 385.

COVERAGE

The early years: A focus on school readiness

A fairly small percentage of children attend early childhood development (ECD) centres; this applied to only 30% of children in 2009, which was nevertheless a 73% increase over 2000 enrolment. Total enrolment increased from 862 000 to 1 488 000 over this period. White children most often receive some form of ECD (53%), compared with 29% of African and Indian children, and 22% of coloured children (see table 1).

Little is known about the quality of care provided at ECD sites, which include day-care centres, crèches, playgroups, nursery schools and preprimary schools. Registered ECD sites only receive a state subsidy of R12 per child per day (Mail & Guardian 12-18/8/11). A nationwide audit of 23 482 ECD sites in 2000 showed that while 90% charged fees, in about half of these fees were not paid regularly. Furthermore, nearly half of all sites charged monthly fees less than R25, and 35% between R25 and R50.

It is not surprising that the audit described the financial support base of a significant number of sites as perilous (Williams & Samuels, 2001).

Between 2001 and 2010, grade R enrolment increased by 197%. The ratio of grade 1 to grade R learners improved from nearly 5:1 in 2001 to 1.6:1 in 2010, but even so there were still almost 400 000 fewer children in grade R than in grade 1 in 2010 (see table 2). Many of these are likely to be under-prepared for schooling, and the extension of grade R provision to achieve 100% coverage should be the main priority. Over the same period, grade 1 enrolment dropped by 4.7%, from just over 1,13m in 2001 to just over 1m in 2010. This is probably due to the expansion of grade R provision, as many under-age children were enrolled in grade 1, but with the provision of grade R were able to access schooling through this route.

TABLE 2

GRADE R ENROLMENT AS % OF GRADE 1 ENROLMENT, 2001-2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Gr R	229 137	266 009	299 701	338 054	389 864	424 839	468 530	524 467	599 391	680 365
Gr 1	1 130 659	1 261 827	1 252 071	1 278 120	1 207 996	1 157 375	1 141 191	1 090 254	1 072 993	1 077 502
Gr R as % of Gr 1	20.3%	21.1%	23.9%	26.4%	32.3%	36.7%	41.1%	48.1%	55.9%	63.1%

SOURCE : DEPARTMENT OF EDUCATION, 2003, 2004, 2005A, 2005B, 2006A, 2008, 2009A; 2010, DEPARTMENT OF BASIC EDUCATION, 2010C & 2010E.

As can be seen from table 3, over three-quarters of schools offer grade R. It needs to be noted, however, that this does not necessarily mean that they are able to accommodate all learners who want to attend that grade. A school may, for example, have one grade R class but several grade 1 classes.

The number of grade 1 learners who have attended a preprimary programme increased from 61% in 2006 to 68% in 2008 and 71% in 2009. This percentage ranged from a low of 41% of grade 1 learners in the Free State to a high of 87% in Limpopo (see table 4).

TABLE 3

ORDINARY PUBLIC AND INDEPENDENT SCHOOLS WITH AND WITHOUT GRADE R, 2009

	No. OF SCHOOLS OFFERING GRADE R	%	No. OF SCHOOLS WITH GRADE 1 BUT NO GRADE R
Eastern Cape	4 413	91.4%	379
Free State	549	37.7%	666
Gauteng	1 213	70.6%	389
KwaZulu-Natal	3 776	85.6%	352
Limpopo	2 277	83.8%	312
Mpumalanga	993	70.4%	365
Northern Cape	271	72.1%	150
North West	751	66.2%	418
Western Cape	783	73.7%	377
Total	15 026	78.6%	3 408

SOURCE : DEPARTMENT OF BASIC EDUCATION, 2011b: 14.

TABLE 4

NUMBER OF GRADE 1 LEARNERS IN ORDINARY SCHOOLS WHO HAVE ATTENDED A PRE-PRIMARY PROGRAMME, BY PROVINCE AND GENDER, 2009

	MALE	FEMALE	TOTAL	%
Eastern Cape	73 963	77 734	151 697	71.9%
Free State	11 426	12 278	23 704	41.1%
Gauteng	63 222	65 915	129 137	73.8%
KwaZulu-Natal	87 891	93 034	180 925	71.6%
Limpopo	53 120	55 675	108 795	86.7%
Mpumalanga	32 025	33 948	65 973	73.3%
Northern Cape	7 629	7 736	15 365	61.8%
North West	20 358	21 614	41 972	55.9%
Western Cape	33 017	35 301	68 318	71.4%
SA	382 651	403 235	785 886	70.9%

SOURCE : DEPARTMENT OF BASIC EDUCATION, 2011b: 27.

Despite the crucial importance of early childhood and preprimary education as the foundation for all further learning, it is an area that needs much greater priority from government than it has received so far. Children in poor areas are less likely to receive ECD and if they do, the quality tends to be doubtful. The implications of this for later learning are evident from research by the University of Stellenbosch's economics department, which found that there are already great differences in maths and literacy learner achievement between the wealthiest 20% of the population compared with the poorest 80%. Interestingly, the individual socioeconomic background of a child was found to be less important than the area in which s/he lives and the school s/he attends (Spaull, 2011).

In its Action Plan to 2014, the Department of Basic Education (DBE) also expresses "concerns around the educational quality of grade R and other forms of ECD" (Department of Basic Education, 2010a), and it aims to increase participation in formal grade R to 80% by 2014 (100% if non-formal institutions are included), and to

100% by 2019. With regard to ECD for children aged 0 to 5, the aim is for a 37% participation rate by 2014 and 44% by 2019.

Primary & Secondary Enrolment

Following rapid growth in school enrolment during the 1980s and 1990s, the number of learners has stabilised. As can be seen from table 5, there was a decrease in primary enrolment by almost 7% between 2001 and 2010, while retention improved, as evidenced by a 9% growth in the number of secondary learners over this period. Highest growth occurred in grades 10 to 12, but grade 12 enrolment remains low compared with the other grades.

With regard to the number of 7 to 15 year olds out of school, their number dropped dramatically from 345 501 in 2002 to 142 843 in 2009, a 59% decrease (see table 6). In total, 662 419 children between the ages of 7 and 18 were not in school in 2009.

TABLE 5

LEARNERS BY GRADE IN ORDINARY PUBLIC SCHOOLS, 2001 & 2010

GRADE	2001		2010		% CHANGE 2001 - 2010
	No.	% OF TOTAL	No.	% OF TOTAL	
1	1 130 659	10.1%	1 077 502	9.7%	-4.7%
2	925 761	8.3%	958 904	8.6%	+3.6%
3	1 068 728	9.5%	938 767	8.5%	-12.2%
4	1 156 863	10.3%	970 216	8.7%	-16.1%
5	1 080 856	9.6%	947 960	8.5%	-12.3%
6	1 006 175	9.0%	948 213	8.5%	-5.8%
7	915 803	8.2%	950 625	8.6%	+3.8%
Subtotal Primary	7 284 845	64.9%	6 792 187	61.2%	-6.8%
8	1 049 017	9.3%	965 283	8.7%	-8.0%
9	897 940	8.0%	974 392	8.8%	+8.5%
10	828 161	7.4%	1 006 381	9.1%	+21.5%
11	691 512	6.2%	808 897	7.3%	+17.0%
12	468 181	4.2%	543 414	4.9%	+16.1%
Subtotal Secondary	3 934 811	35.1%	4 298 367	38.8%	+9.2%
Total	11 219 656	100.0 %	11 090 554	100.0 %	-1.2%

NB. figures exclude learners with special education needs.

SOURCE : DEPARTMENT OF EDUCATION, 2003; DEPARTMENT OF BASIC EDUCATION, 2010d.

TABLE 6

OUT OF SCHOOL POPULATION, 2002-2009

	7-15		16-18		7-18	
	No.	%	No.	%	No.	%
2002	345 501	3.7%	514 534	17.6%	860 035	7.0%
2003	265 328	2.8%	522 914	17.2%	788 242	6.4%
2004	216 678	2.3%	520 016	17.3%	736 694	6.3%
2005	209 309	2.2%	539 177	17.8%	748 486	6.0%
2006	227 324	2.4%	551 628	17.5%	778 951	6.2%
2007	200 520	2.1%	477 411	14.8%	677 931	5.4%
2008	194 901	2.1%	525 200	16.2%	720 101	5.7%
2009	142 843	1.5%	519 576	16.7%	662 419	5.3%
% Change	-58.7%		+1.0%		-23.0%	

SOURCE : DEPARTMENT OF BASIC EDUCATION 2011A: 32.

In terms of the proportion of 16 to 18 year olds attending education institutions, figures remained fairly stable between 2002 and 2009, with a slight increase in attendance among Africans (from 83% to 85%), and a slight decrease among whites (from 92% to 87%) (see table 7). Overall, there were 519 576 youths aged 16 to 18 not in school in 2009. A higher proportion of male than female 16 to 18 year olds were enrolled in education institutions over this period.

According to 2009 General Household Survey data, this was mainly because a higher proportion of 18 year old women have completed grade 12 compared with their male counterparts (17% and 11% respectively). However, the gap between them has narrowed; in 2002, the Gender Parity Index was 0.92 but in 2009 it was 0.98 (Department of Basic Education, 2011a: 29).

TABLE 7

PERCENTAGE OF 16-18 YEAR OLDS ATTENDING EDUCATION INSTITUTIONS, BY RACE AND BY GENDER, 2002-2009

	2002	2003	2004	2005	2006	2007	2008	2009
African	83%	84%	84%	83%	84%	86%	85%	85%
Coloured	68%	65%	66%	67%	63%	71%	69%	68%
Indian	80%	79%	81%	88%	69%	82%	81%	80%
White	92%	91%	89%	92%	88%	90%	84%	87%
Total	82%	83%	83%	82%	83%	85%	84%	83%
Male	86%	85%	86%	85%	84%	87%	84%	84%
Female	79%	80%	79%	79%	81%	84%	83%	82%
GPI	0.92%	0.94%	0.92%	0.93%	0.95%	0.97%	0.98%	0.98%

SOURCE : DEPARTMENT OF BASIC EDUCATION, 2011A: 29-30.

TABLE 8

GROSS ENROLMENT RATE BY LEVEL AND PROVINCE, 2001 & 2009 (%)

	PRIMARY		SECONDARY		TOTAL	
	2001	2009	2001	2009	2001	2009
Eastern Cape	125%	121%	67%	75%	100%	101%
Free State	117%	92%	89%	84%	105%	89%
Gauteng	112%	83%	96%	82%	106%	82%
KwaZulu-Natal	122%	97%	91%	85%	109%	92%
Limpopo	110%	100%	90%	100%	101%	100%
Mpumalanga	122%	100%	97%	94%	111%	98%
Northern Cape	100%	94%	66%	77%	86%	87%
North West	108%	101%	85%	86%	98%	95%
Western Cape	111%	88%	82%	76%	99%	83%
Total	117%	98%	86%	85%	103%	92%

SOURCE : 2001 INFORMATION : BOT, M. 2005; 2009 INFORMATION: DEPARTMENT OF BASIC EDUCATION, 2010b: 9.

Another way to express school attendance is by looking at gross and net enrolment. Gross enrolment refers to the total number of learners enrolled in primary or secondary school as a proportion of the appropriate age group in the population. Until a few years ago, primary schools used to be over-enrolled due to a large number of under- and over-age children. Mainly due to age-by-grade regulations and restrictions on the number of times a learner can repeat, gross enrolment at primary level had fallen to around or below 100% by 2009 in all provinces except for the Eastern Cape, where it was 121% (see table 8). At secondary level, the gross enrolment rate has remained more or less the same; 86% in 2001 and 85% in 2009. In 2009, gross enrolment was lowest in the Eastern Cape (75%) and highest in Limpopo (100%).

Net enrolment refers to the number of appropriately aged learners in school as a proportion of the corresponding age group in the population. At primary level, the net enrolment rate in 2001 was 92%, while in 2009 it dropped to 78% - the latter figure is the same whether using population estimates from Statistics South Africa or from the Actuarial Society of South Africa, together with age by grade enrolment figures from the DBE's annual survey for 2009. At secondary level, the net enrolment rate dropped from 61% to 57% over this period.

With regard to the proportion of appropriately aged children in each grade, there has been a steady improvement over the last 15 years. Whereas in 1995, this proportion ranged from a high of 73% in grade 1 (i.e. 6 or 7 years old) to 38% in grade 12 (i.e. 17 or 18 years old), by 2009 this had improved to 85% in grade 1 and to 53% in grade 12 (see table 9). Again, this is mainly due to the age-by-grade

regulations and limits placed on the number of times a learner can repeat. Even so, half of learners in grades 10 to 11 are over age, and the lower proportion in grade 12 (41%) is most likely due to over age learners dropping out or having been held back in grade 11, as they had little prospect of passing the senior certificate examination at the end of grade 12.

PROGRESSION

Over the past ten years, the number of learners who progress from one grade to the next has remained fairly stable in the early grades, with grade 2 enrolment in 2010 representing some 90% of grade 1 enrolment in 2009; the same figure as in 2001 (see table 10). Over-enrolment in grade 8 has improved from 114% to 103% over this period, while grade 12 enrolment, as can be expected in view of high repetition rates, gate-keeping and/or culling of learners in grade 11, remains low.

As can be seen from table 11, repetition rates have dropped over the past ten years in all grades with the exception of grade 10, where the number of repeaters increased from 10% in 2001 to 17% in 2009. Overall, the percentage of repeaters dropped from 11% in 2001 to 9% in 2009, most likely because of limitations on the number of times a learner can repeat.

International comparative information for primary schools for 2007 (UNESCO, 2010: 355, in DBE, 2011b: 33) shows that South Africa's average level of repetition in primary schools (at 7%), was higher than the average level for developing countries (5%) and for developed countries

TABLE 9

UNDER-AND OVER-AGE ENROLMENT, 1995 & 2009

GRADE	1995			2009		
	UNDER AGE	APPROPRIATELY AGED	OVER AGE	UNDER AGE	APPROPRIATELY AGED	OVER AGE
1	4%	73%	23%	4%	85%	11%
2	4%	64%	30%	3%	77%	18%
3	5%	58%	37%	3%	72%	24%
4	5%	56%	39%	3%	65%	29%
5	5%	51%	44%	4%	61%	34%
6	6%	50%	44%	3%	60%	36%
7	6%	49%	45%	3%	59%	37%
8	6%	43%	51%	2%	57%	40%
9	7%	41%	52%	2%	52%	44%
10	7%	41%	52%	2%	44%	52%
11	7%	39%	54%	3%	46%	49%
12	6%	38%	56%	4%	53%	41%

SOURCE : 1995 INFORMATION: BOT, M. 1997; 2009 INFORMATION: DEPARTMENT OF BASIC EDUCATION, 2011B: 28.

TABLE 10

NET FLOW-THROUGH RATES IN SELECTED GRADES

	2000/01	2009/10
GRADE 1-2	90%	90%
GRADE 7-8	114%	103%
GRADE 11-12	67%	66%

SOURCE : 2000/01 INFORMATION: BOT, M. 2005.
2009/10 INFORMATION: DEPARTMENT OF
EDUCATION, 2009B & DEPARTMENT OF
BASIC EDUCATION, 2010D

(less than 1%). In general, repetition is higher among male learners than female learners (10% and 8% respectively).

High repetition in grades 10 and 11 are attributed to poorly achieving learners being held back, so that they do not negatively affect the school's senior certificate examination pass rate. These learners may also be advised to register as part-time candidates, and there has been an increase in part-time enrolment while full-time registrations decreased by 7 706 in 2009 and by a much higher number in 2010 - 21 771 (Mail & Guardian 1-7/4/11).

TABLE 11

PERCENTAGE OF REPEATERS IN EACH GRADE IN 2001 & 2009

GRADE	REPEATERS	
	2001	2009
1	8%	7%
2	8%	7%
3	9%	7%
4	10%	7%
5	8%	7%
6	6%	7%
7	4%	5%
8	16%	8%
9	18%	11%
10	10%	17%
11	28%	16%
12	17%	8%
Total	11%	9%

SOURCE : 2001 DATA: BOT & PILLAY, 2004; 2009 DATA
DEPARTMENT OF BASIC EDUCATION, 2011A: 36.

TABLE 12

DROPOUT RATE BY GRADE, 2007/2008

GRADE	1	2	3	4	5	6	7	8	9	10	11
DROPOUT RATE	1.0%	0.5%	1.2%	0.3%	2.0%	1.5%	2.7%	3.8%	6.5%	11.5%	11.8%

SOURCE :DEPARTMENT OF BASIC EDUCATION, 2011A: 39.

These learners are also likely to drop out, which is reflected in the high dropout rates in these grades (see table 12). Dropout figures were available only for 2007/08. The overall dropout rate of children enrolled in 2007 who were not in school in 2008 was 4%, ranging from a low of 0.5% in grade 2 to a high of 11.8% in grade 11.

The Western Cape has the highest number of dropouts, which the minister of basic education, Ms Angie Motshekga, blames on social problems such as fetal alcohol syndrome, gang-related activities and drug dependence (Die Burger 14/7/11).

PERFORMANCE

Annual national assessments

In addition to the senior certificate examinations, performance of the schooling system is now also being measured at grade 3 and 6 levels through the annual national assessments (ANA) introduced in 2008, which

replaced the systemic evaluations. As can be seen from table 13, results in most provinces are extremely low, and have declined between 2009 and 2011. Results may not be strictly comparable, however, as sampling procedures varied and the tests may not have been of the same level of difficulty. In 2009, about 90% of schools participated in the ANA. Western Cape learners in both grade 3 and 6 obtained higher average scores than any other province, most likely as a result of the literacy and numeracy strategy implemented by the province's education department since 2002. Mpumalanga learners scored the lowest at both grade 3 and grade 6 level, with Limpopo and North West not far behind.

Table 14 shows even more strikingly how poor performance is in the provinces – at grade 3 level, between 41% and 67% of schools did not achieve the required literacy level and between 49% and 83% of schools did not achieve the required numeracy level. As can be expected, the situation is worse at grade 6 level, where between 41% and 85% of schools in the different provinces had not achieved the required language level, and between 45% and 83% had not achieved the expected maths level.

TABLE 13

AVERAGE PERCENTAGE SCORES BY PROVINCE AFTER RE-MARKING, 2011

	GRADE 3		GRADE 6	
	LITERACY	NUMERACY	LANGUAGES	MATHEMATICS
Eastern Cape	39%	35%	29%	29%
Free State	37%	26%	23%	28%
Gauteng	35%	30%	35%	37%
KwaZulu-Natal	39%	31%	29%	32%
Limpopo	30%	20%	21%	25%
Mpumalanga	27%	19%	20%	25%
Northern Cape	28%	21%	27%	28%
North West	30%	21%	22%	26%
Western Cape	43%	36%	40%	41%
Total 2011	35%	28%	28%	30%
Total 2009	39%	44%	31%	30%

SOURCE : DEPARTMENT OF BASIC EDUCATION, 2011A; DEPARTMENT OF BASIC EDUCATION, 2011C.

TABLE 14a

GRADE 3 LITERACY AND NUMERACY PERFORMANCE BY LEVEL OF ACHIEVEMENT, 2011

	NOT ACHIEVED (<35%)		PARTIALLY ACHIEVED (35-49%)		ACHIEVED (50-69%)		OUTSTANDING (>70%)	
	LITERACY	NUMERACY	LITERACY	NUMERACY	LITERACY	NUMERACY	LITERACY	NUMERACY
Eastern Cape	45%	51%	17%	24%	27%	19%	10%	6%
Free State	50%	71%	17%	15%	22%	10%	11%	4%
Gauteng	53%	62%	15%	17%	20%	15%	13%	6%
KwaZulu-Natal	48%	62%	16%	18%	21%	13%	15%	7%
Limpopo	61%	81%	16%	13%	16%	5%	7%	1%
Mpumalanga	67%	83%	15%	11%	13%	5%	5%	1%
Northern Cape	66%	78%	14%	13%	13%	7%	8%	2%
North West	63%	81%	15%	12%	15%	5%	6%	2%
Western Cape	41%	49%	14%	23%	27%	18%	19%	9%
Total	53%	66%	16%	17%	20%	12%	11%	5%

SOURCE : DEPARTMENT OF BASIC EDUCATION, 2011c.

TABLE 14b

GRADE 6 LANGUAGE AND MATHS PERFORMANCE BY LEVEL OF ACHIEVEMENT, 2011

	NOT ACHIEVED (<35%)		PARTIALLY ACHIEVED (35-49%)		ACHIEVED (50-69%)		OUTSTANDING (>70%)	
	LANGUAGE	MATHS	LANGUAGE	MATHS	LANGUAGE	MATHS	LANGUAGE	MATHS
Eastern Cape	67%	71%	19%	20%	12%	8%	2%	1%
Free State	80%	74%	12%	16%	7%	8%	2%	2%
Gauteng	54%	53%	17%	23%	22%	17%	7%	6%
KwaZulu-Natal	68%	64%	14%	21%	14%	10%	4%	4%
Limpopo	85%	80%	9%	14%	5%	5%	1%	1%
Mpumalanga	85%	83%	9%	12%	5%	4%	1%	1%
Northern Cape	70%	73%	15%	17%	12%	7%	3%	3%
North West	83%	82%	11%	14%	5%	4%	1%	0%
Western Cape	41%	45%	24%	26%	27%	19%	8%	11%
Total	70%	69%	15%	19%	12%	9%	3%	3%

SOURCE : DEPARTMENT OF BASIC EDUCATION, 2011c.

School leaving

According to Statistics South Africa, 44% of 24 year olds have completed grade 12, (Department of Basic Education 2011b: 42), while fewer than 10% of South Africans achieve 15 years of education – matric plus three years for a degree (Die Burger 22/7/11). The target for 2014 is to ensure that 50% obtain a National Senior Certificate (NSC) (Department of Basic Education, 2011b: 41). Between 2001 and 2010, the number of candidates writing the senior certificate examination (SCE) increased by 20%, and in 2010 represented a higher proportion of grade 12 enrolment (99%, compared with 96% in 2001). Only the North West experienced a drop in the number of candidates over this period (by 22%), while the highest increases were in Northern Cape (54% more candidates) and Gauteng (43%) (see table 15).

In 2010, three provinces had a lower pass rate than in 2001: Limpopo (two percentage points lower), Northern Cape (a drop of 12 percentage points) and Western Cape (a six percentage point drop). The highest increases were in North West, which also had fewer candidates (13 percentage points higher), Eastern Cape and Free State (12 percentage points higher). The percentage of university entrance passes increased in all provinces.

Another area of concern surrounds the rapid increase in the number of part-time candidates writing matric – their number went up from 1 116 in 2008 to 82 835 in 2010, and 108 237 part-time candidates have registered for the 2011 SCE. At the same time, there has been a drop in the number of full-time candidates registered to write in 2011 (just over 47 000 fewer than in 2010). Parliament's basic

education portfolio committee has asked the DBE to fully investigate this trend, as it felt there were other causes in addition to candidates who failed in the previous year wanting to rewrite (Mail & Guardian, 23-29/9/11).

Concern continues about the low number of candidates writing and passing maths and physical science, as well as about the low requirement for a pass (30% or 40%, depending on the subject). On a more positive note, pass rates at Dinaledi schools improved in 2010, with 57% of 47 760 candidates passing mathematics. Dinaledi candidates accounted for 32% of all candidates who achieved more than 50% for maths. In physical science, 59.5% of 36 861 Dinaledi candidates passed, and more than a third achieved between 60% and 69%. Overall, 57% of learners passed maths in Dinaledi schools and 59% passed physical science, both well above the national average in these subjects (Skills Portal, 2011).

Underlying causes

The policy of second language education, whereby learners switch over to English or Afrikaans in grade 4, is often cited as being responsible for poor performance. In 2005, the grade 6 Systemic Evaluation National Report showed that those learning in their mother tongue achieved an average score of 69% in language and 48% in maths, while those learning in a second language achieved 32% and 23% respectively. Professor Jill Adler from the University of the Witwatersrand said at a seminar held in July 2011 that the use of language was crucial for grasping complex mathematical concepts (Business Day, 22/7/11). However,

TABLE 15

NUMBER OF CANDIDATES AND PASS RATES IN THE SENIOR CERTIFICATE EXAMINATIONS BY PROVINCE, 2001 & 2010

	No. OF CANDIDATES		TOTAL PASS %		% WITH UNIVERSITY ENTRANCE PASS	
	2001	2010	2001	2010	2001	2010
Eastern Cape	63 204	64 090	46%	58%	7%	16%
Free State	26 637	27 586	59%	71%	15%	21%
Gauteng	64 339	92 241	74%	79%	21%	34%
KwaZulu-Natal	93 340	122 444	63%	71%	17%	26%
Limpopo	82 246	94 632	60%	58%	13%	16%
Mpumalanga	38 693	51 695	47%	57%	10%	16%
Northern Cape	6 619	10 182	84%	72%	15%	21%
North West	36 734	28 909	63%	76%	14%	28%
Western Cape	37 559	45 764	83%	77%	25%	31%
Total	449 371	537 543	62%	68%	15%	24%

SOURCE : DEPARTMENT OF EDUCATION, 2001; DEPARTMENT OF BASIC EDUCATION, 2010c.

it is likely that most schools where learners are taught in their mother tongue tend to be former Model C, House of Delegates and House of Representative schools, which historically produced better results than schools falling under the former Department of Education and Training and the former homeland departments. A comparison of language policies among schools falling under the latter departments might throw more light on the matter.

More generally, there is widespread recognition that proficiency in English, which is the most often preferred medium of instruction, is based on proficiency in the mother tongue. Together, these determine scholastic progress. Linguists tend to recommend that mother tongue instruction should occur up to grade 6, and that the second language is taught for six years as well before it can be used successfully as instruction medium. Margie Owen-Smith, who manages the Home-Language Project on behalf of the SGBs of five English medium schools in Johannesburg, argues that this would 'allow concepts to be taught effectively through a language children understand', although a drawback is 'that it too easily leads to the separation of children into what amounts to ethnic groups' (Owen-Smith, 2010).

These issues need careful consideration, and there needs to be a much greater effort to attract African teachers, not only for grade R, but for the foundation phase more generally. But this is not happening, despite the introduction of Funza Lushaka bursaries. According to figures from the Department of Higher Education, only 1 275 students were expected to graduate in foundation phase teaching in 2009, and only 168 of these were African students.

Professor Maureen Robinson, dean of education at Cape Peninsula University of Technology (CPUT), has found that African students perceive foundation phase teaching to be a low-status career. A CPUT lecturer said students view foundation phase teaching as kindergarten. The situation is seen as a crisis in view of the official policy of mother tongue education in grades R to 3, which requires African language teachers. As part of a European Union programme, at least 200 African learners from rural areas are to be offered bursaries from 2012 to specialise in foundation phase teaching (Sunday Times, 24/7/11).

Another probable cause of poor results is inadequate tuition arising from many factors such as limited resources, overcrowded classrooms and poorly prepared teachers. A comparison of maths performance of about 9 000 grade 6 learners in schools on either side of the North West provincial border with Botswana found that Botswana learners scored significantly higher on an initial test and made significantly higher gains over the academic year, as measured by a second test. The study revealed that teachers bunking lessons was a major cause of learners' poor academic achievement, with South African teachers not teaching 60% of grade 6 maths lessons and Botswana teachers failing to teach 40% of them. It also showed that teachers' weak subject knowledge and resultant lack of confidence in the classroom were serious barriers to learner success (Carnoy et al, 2011).

These findings also place a question mark surrounding the policy whereby children are only allowed to repeat once per phase; should they continue to progress to the next grade or phase even if they have not mastered the basics?

TABLE 16

NUMBER AND % OF ORDINARY SCHOOLS LACKING CERTAIN FACILITIES, 2007

	NO OF SCHOOLS	WITHOUT								LACKING DESKS & CHAIRS	
		LABORATORIES		LIBRARIES		TOILETS		SPORTS FACILITIES			
		No.	%	No.	%	No.	%	No.	%	No.	%
Eastern Cape	5 677	5 184	91%	5 128	90%	524	9%	401	7%	4 887	86.1%
Free State	1 616	1 279	79%	1 194	74%	80	5%	630	39%	721	44.6%
Gauteng	2 037	1 223	60%	846	42%	4	-	296	15%	1 435	70.4%
KwaZulu-Natal	5 831	5 128	88%	4 632	79%	135	2%	1 879	32%	4 562	78.2%
Limpopo	3 935	3 699	94%	3 642	93%	44	1%	335	9%	3 615	91.9%
Mpumalanga	1 847	1 636	89%	1 527	83%	17	1%	119	6%	1 612	87.3%
Northern Cape	611	431	71%	432	71%	3	-	118	19%	472	77.3%
North West	1 697	1 428	84%	1 374	81%	37	2%	132	8%	1 384	81.6%
Western Cape	1 466	953	65%	690	47%	2	-	169	12%	862	58.8%
Total	24 717	20 961	85%	19 465	79%	846	3%	4 079	17%	19 550	79.1%

SOURCE : NATIONAL EDUCATION INFRASTRUCTURE MANAGEMENT SYSTEM 2007, MOTSHEKGA A. 2010.

TABLE 17

LEARNER/CLASSROOM RATIOS, 2000 & 2009

	2000	2009	
	L/C RATIO	L/C RATIO	% OF SCHOOLS WITH CLASS SIZES OVER 40
Eastern Cape	43	34	35%
Free State	33	36	26%
Gauteng	33	38	40%
KwaZulu-Natal	40	37	44%
Limpopo	40	39	46%
Mpumalanga	48	34	48%
Northern Cape	34	36	14%
North West	26	32	32%
Western Cape	31	38	42%
Total	38	36	40%

SOURCE : 2001 DATA: BOT, M. 2005; 2009 DATA: DEPARTMENT OF BASIC EDUCATION, 2011B: 11-12.

QUALITY OF PROVISION

Considerable shortages in infrastructure persist, which are likely to have a negative impact on the quality of education provided. Especially worrying is the lack of libraries, as the availability of reading materials supports literacy and academic performance more generally. The last available figures are for 2007, which show that 85% of schools do not have laboratories, 79% have no libraries, and 79% lack desks and chairs. With regard to the latter, almost 4m desks were needed and just over 3m chairs, with the greatest need in the Eastern Cape, followed by Limpopo and KwaZulu-Natal. On a more positive note, most schools had toilets (97%) and sports facilities (83%).

While on average, there was an improvement in the learner/classroom ratio between 2000 and 2009 (from 38 to 36 learners per class), the situation improved in some provinces but worsened in others, most notably in Gauteng and the Western Cape (see table 17). This is most likely caused by the migration of learners from other provinces into these provinces. More generally, over 8 000 public schools had average class sizes above the norm of 40 in 2009.

TEACHER SUPPLY

The number of teachers employed in public schools increased by almost 15% between 2001 and 2010, while the number of learners increased by 3%. As a consequence, the learner/teacher ratio improved from 34:1 to 30:1 over this period. The independent school sector grew rapidly

over this decade, with the number of learners increasing by 84% and the number of teachers by 94% (see table 18). Another area that showed rapid growth is in the number of teachers employed by school governing bodies. Between 1997 and 2009, their number increased from 5 943 to 48 209; a 711% increase. Most of these teachers were employed in Gauteng (36%), followed by KwaZulu-Natal and Western Cape (16% each) (South African Institute of Race Relations, 2010: 401).

As can be seen from table 19, almost a quarter of schools have learner/teacher ratios over 35. Most of these schools were in KwaZulu-Natal (1 759) followed by the Eastern Cape (1 320).

Although by 2010, 95% of educators were qualified (up from 64% in 1994), there is concern that this has had little impact on learner achievement, as evidenced by continuing poor achievement levels. In addition, qualifications in scarce subjects remain a problem. In KwaZulu-Natal, for example, almost one third, or 9 229 out of the province's 34 968 science teachers lack formal qualifications to teach science subjects. Of the 9 229 unqualified science teachers, 1 130 only have matric without any further training, 925 have matric with one or two years of further training, and 7 174 have a Bachelor's degree without the required Postgraduate Certificate in Education.

In the 2009/2010 financial year only 376 unqualified teachers registered for the National Professional Diploma in Education (NPDE) while a total of 397 underqualified

TABLE 18

NUMBER OF LEARNERS AND TEACHERS AT PUBLIC AND INDEPENDENT SCHOOLS, 2001-2010

	PUBLIC SCHOOLS			INDEPENDENT SCHOOLS		
	LEARNERS	TEACHERS	L/T	LEARNERS	TEACHERS	L/T
2001	11 492 976	339 344	33.9	245 150	14 857	16.5
2002	11 660 187	338 208	34.5	268 866	15 757	17.1
2003	11 744 013	339 179	34.6	294 909	23 419	12.6
2004	11 875 439	334 408	34.5	300 952	17 634	17.1
2005	11 902 316	362 670	32.8	315 449	19 463	16.2
2006	11 962 176	367 188	32.6	340 060	19 407	17.5
2007	12 041 220	373 122	32.3	369 281	22 330	16.5
2008	11 873 162	378 060	31.4	366 201	22 893	16.0
2009	11 828 747	386 587	30.6	386 098	24 577	15.7
2010	11 809 355	389 329	30.3	450 744	28 780	15.7
% Change	+2.8%	+14.7%		+83.9%	+93.7%	

SOURCE : DEPARTMENT OF EDUCATION, 2005A, 2005B, 2006A, 2006B & 2007; DEPARTMENT OF BASIC EDUCATION, 2010D; SOUTH AFRICAN INSTITUTE OF RACE RELATIONS, 2004, 2009 & 2010.

TABLE 19

NUMBER OF SCHOOLS WITH LEARNER/EDUCATOR RATIOS OVER 35:1 BY PROVINCE, 2010

	INTERVALS				TOTAL	% OF SCHOOLS IN PROVINCE
	36-40	41-45	46-50	>50		
Eastern Cape	754	328	114	124	1 320	23.6%
Free State	122	29	10	6	167	11.7%
Gauteng	569	130	27	17	743	36.9%
KwaZulu-Natal	1 104	418	128	109	1 759	29.7%
Limpopo	307	94	34	23	458	11.6%
Mpumalanga	294	45	14	14	367	20.0%
Northern Cape	111	18	6	4	139	23.3%
North West	351	71	23	10	455	27.6%
Western Cape	215	40	6	2	263	18.1%
Total	3 827	1 173	362	309	5 671	23.2%

SOURCE : REPUBLIC OF SOUTH AFRICA, 2010.

teachers pursued various supplementary courses to improve their qualifications (Statement issued by Roman Liptak, Inkatha Freedom Party, 19/7/10).

It is not surprising that more than 5 400 foreign teachers work in public schools, mostly teaching maths, physical science and technology at secondary schools (The Times, 26/7/11).

Another area of concern is that the number of teachers being trained is insufficient to keep up with the number leaving the profession. Basic education minister Angie Motshekga said in parliament that 8 657 teachers had left the service in 2005-06, while 8 918 had left in 2006-07 and in 2007-08 there were 9 175 departures. The two provinces hardest hit were KwaZulu-Natal and the Western Cape. Resignations accounted for the highest number of terminations, followed by retirements, while death recorded the third largest number (Business Day, 4/6/2010). Estimates are that about 12 000 to 16 000 new teachers are needed annually, but only around 6 000 graduate each year, according to the DBE (The Times, 26/7/11).

A further area requiring attention is the quality of teacher education at universities. According to two Cape Town-based academics, Peter Kallaway and Rob Siebörger, 'university education departments are usually ill-equipped for teacher education... they are even more problematic in relation to the training of primary teachers as they have had little expertise in the past.' The problem is compounded by a lack of investment in this sector and by tight financial constraints, which do not allow for the 'protracted interaction between teacher trainees and student teacher' necessary to impart skills and critical competencies. They furthermore say that attempts to upgrade teachers are 'often pathetic' and that the problem is that the teachers' actual knowledge base is poor (Cape Times, 1/8/11).

Teacher training is expected to change drastically over the next two years, following the publication of minimum requirements for teacher training qualifications in the Government Gazette in July 2011. Universities will have to adjust their qualifications and curriculum based on this policy, which aims to ensure that they produce the type of teachers needed (Die Burger, 28/9/11).

“ NEARLY 4 OUT OF EVERY 10 LEARNERS DO NOT ATTEND GRADE R, WHICH IS LIKELY TO NEGATIVELY AFFECT THEIR SCHOOL READINESS.”

CONCLUSION

This overview shows that in the last ten years, progress has been made in terms of coverage, with fewer than 150 000 children of compulsory schooling age not in school in 2009. In addition, better flow-through and retention have resulted in a 9% growth in secondary enrolment, and a reduction in the percentage of over-age learners in each grade. The extension of grade R has seen enrolment almost triple between 2001 and 2010, reaching nearly two-thirds of eligible children. Finally, the teacher/learner ratio has improved, as have teacher qualifications.

Despite attention directed to ECD and grade R provision, fewer than one out of every three children under the age of four attend ECD sites, the quality of which varies greatly. Nearly four out of every ten learners do not attend grade R, which is likely to negatively affect their school readiness.

Performance levels are still poor, and repetition and dropout rates remain high; four out of every ten learners matriculate. Far too many schools have appalling literacy and numeracy results by grade 3, which worsen by grade 6. Finally, shortages of qualified science and maths teachers persist, and there are doubts about the quality of teacher education, especially where it concerns primary school teacher education.

Plenty of challenges thus remain, probably the most important of which is the need to focus on the early years, both in terms of school readiness and literacy and numeracy development during the Foundation Phase, in order to establish a firm basis for all further learning. In this regard, the Western Cape education department seems to be on the right track (see accompanying article by Adele Gordon and Monica Mawoyo). Innovative teaching and learning materials need to be developed in all languages, and the use of teacher assistants who are fluent in the regional languages should be considered to assist with learning in the children's home language. In addition, circuit and district staff need to provide the necessary support through workshops and demonstrations in order to ensure that teachers fully grasp the material they are teaching. Unless this happens, repetition, poor achievement and dropout will remain the dominant characteristics of South Africa's schooling system.

REFERENCES

- BOT, M (1997)**
Education 2000 Plus macro indicators: report on baseline data 1991 - 1996. Johannesburg: Centre for Education Policy Development.
- BOT, M (2005)**
School education in South Africa – tracking change over ten years. EduSource Data News, 48/June 2005: 1-10.
- BOT, M & PILLAY, M (2004)**
Schooling provision in South Africa 1990-2002. EduSource Data News, 43/May 2004: 13-26.
- CARNOY, M, CHISHOLM, L, CHILISA, B ET AL (2011)**
The low achievement trap in middle income countries: Comparing Botswana and South Africa. Draft report. Stanford University, HSRC and University of Botswana.
- DEPARTMENT OF BASIC EDUCATION (2010A)**
Action plan to 2014: towards the realisation of schooling 2025. Presentation to the Portfolio Committee, Cape Town, November. <http://www.pmg.org.za/files/docs/101102action.doc>. [Retrieved 1/8/11].
- DEPARTMENT OF BASIC EDUCATION (2010B)**
Education Statistics in South Africa 2009. Pretoria.
- DEPARTMENT OF BASIC EDUCATION (2010C)**
Report on the national senior certificate examination results, 2010. Pretoria.
- DEPARTMENT OF BASIC EDUCATION (2010D)**
School realities 2010. Pretoria.
- DEPARTMENT OF BASIC EDUCATION (2011A)**
Macro indicator trends in schooling: Summary report 2011. Pretoria.
- DEPARTMENT OF BASIC EDUCATION (2011B)**
Report on the 2008 and 2009 annual surveys for ordinary school. Pretoria.
- DEPARTMENT OF BASIC EDUCATION (2011C)**
Report on the annual national assessments of 2011. Pretoria.
- DEPARTMENT OF BASIC EDUCATION (2011D)**
School realities 2011. Pretoria.
- DEPARTMENT OF EDUCATION (2001)**
Report on the senior certificate examination 2001. Pretoria.
- DEPARTMENT OF EDUCATION (2003)**
Education statistics in South Africa at a Glance in 2001. Pretoria.
- DEPARTMENT OF EDUCATION (2004)**
Education statistics in South Africa at a Glance in 2002. Pretoria.
- DEPARTMENT OF EDUCATION (2005A)**
Education statistics in South Africa at a Glance in 2003. Pretoria.
- DEPARTMENT OF EDUCATION (2005B)**
Education statistics in South Africa at a Glance in 2004. Pretoria.
- DEPARTMENT OF EDUCATION (2006A)**
Education statistics in South Africa at a Glance in 2005. Pretoria.
- DEPARTMENT OF EDUCATION (2006B)**
School realities 2006. Pretoria.
- DEPARTMENT OF EDUCATION (2007)**
School realities 2007. Pretoria.
- DEPARTMENT OF EDUCATION (2008)**
Education statistics in South Africa 2006. Pretoria.
- DEPARTMENT OF EDUCATION (2009A)**
Education statistics in South Africa in 2007. Pretoria.
- DEPARTMENT OF EDUCATION (2009B)**
School realities 2009. Pretoria.
- DEPARTMENT OF EDUCATION (2010)**
Education statistics in 2008. Pretoria.
- MOTSHEKGA, A (2010)**
National Assembly, Question for written reply: Question 3454 (Internal question paper: 39-2010).
- OWEN-SMITH, M (2010)**
The language challenge. Focus on Learning & Teaching: Journal of the Helen Suzman Foundation, 56:31-37.
- REPUBLIC OF SOUTH AFRICA (2010)**
EMIS 10th day school survey data 2010. Issued by Parliament, December 15 2010.
- SKILLS PORTAL (2011)**
Dinaledi upgrades matric results. 4 April. <http://www.skillsportal.co.za/page/education/schools/396698-Dinaledi-upgrades-matric-results>. [Retrieved 12 October 2011].
- SOUTH AFRICAN INSTITUTE OF RACE RELATIONS (2004)**
South Africa survey 2003/2004. Johannesburg: SAIRR
- SOUTH AFRICAN INSTITUTE OF RACE RELATIONS (2009)**
South Africa survey 2008/2009. Johannesburg: SAIRR
- SOUTH AFRICAN INSTITUTE OF RACE RELATIONS (2010)**
South Africa survey 2009/2010. Johannesburg: SAIRR
- SPAULL, N (2011)**
A preliminary analysis of SACMEQ III. Stellenbosch Economic Working Papers: 11/11. Stellenbosch University: Department of Economics.
- WILLIAMS, T & SAMUELS, ML (2001)**
The nationwide audit of ECD provisioning in South Africa. Pretoria.

Strengthening Early Literacy and Numeracy Teaching and Learning

Adele Gordon, Monica Mawoyo and Carla Pereira

THE CONTEXT: POOR ATTAINMENT IN LITERACY AND NUMERACY

The results of the 2011 Annual National Assessments (ANA) for grades 1 – 6 indicate that it is vital for the broader education community – government, provinces, schools, communities and families - to pay far more attention to teaching learners to read, write and calculate. Other than literacy scores of grade 3 Western Cape learners, attainment levels are far short of the 50% improvement targeted when the Foundations for Learning Campaign (FLC) was launched in March 2008 (Department of Education, 2008). These results corroborated those of the Progress in International Reading Literacy Study (PIRLS) grade 5 reading and literacy test held in 2006 in which South Africa had the lowest scores.

This article details trends in learner attainment levels in literacy/languages and numeracy/mathematics¹ prior to and including the 2011 ANA test scores, and government's responses to low achievement levels by learners across all provinces in these learning areas. Following this, we discuss the Western Cape Education Department's (WCED's) LitNum strategy, a multi-pronged approach implemented in 2006 (Western Cape Education Department, 2006). The findings of a baseline study and an interim evaluation study conducted by JET Education Services chart the impact of the WCED's interventions on attainment trends in the province (Taylor & Pereira, 2010; Pereira et al, 2011).

A further study of considerable interest to South African educators is the McKinsey Report (Mourshed et al, 2010), a comparative policy analysis conducted across a range of countries, including South Africa, focusing specifically on the WCED's efforts to improve education in the province. Unlike other international comparative studies, such as the Trends in International Mathematics and Science Study (TIMSS), the McKinsey Report examined commonalities underpinning education improvement policies of selected countries, chosen to represent a continuum of achievement - from the most successful to the least successful - although all the countries they selected have shown some improvement over a period. This allowed the researchers to pinpoint key elements of policy across different attainment levels. As a result, their analysis provides a useful entry point to consider the proposed literacy/language and numeracy/mathematics interventions of the Department of Basic Education (DBE).

This year other provinces have established their own literacy/language and numeracy/mathematics programmes for foundation and intermediate phase learners. These are aligned with the framework created by the DBE but are not included in the discussion as they were being announced and implemented at the time of writing.

Finally, we consider challenges for implementers. One is the content and depth of teacher education programmes that will ensure teachers have the conceptual knowledge and pedagogical competences for this programme to achieve its goals, namely to ensure that all learners achieve satisfactory levels of numeracy/mathematics and literacy/languages early on in their school careers. Another is to question how a centralised programme can address the diverse range of needs and interests represented across South African schools.

NATIONAL ASSESSMENTS PRIOR TO 2011

National assessments have been a feature of the South African education system since 2001. They offer a powerful lens through which to view the performance and health of the education system by:

- determining the level of achievement of learners within the system;
- highlighting specific areas/issues within the system that require further attention/investigation; and
- serving as a baseline for comparison against future systemic evaluation studies.

The Systemic Evaluation programme, run in 2001, 2004 and 2007, involved in each run one grade and a sample of between 35 000 and 55 000 learners. Over the period, numeracy scores did not change and there was a small decline in literacy scores at the national level. The national scores are given in table 1.

Provincial differences, presented in figures 1 and 2, portray the Western Cape as having achieved the greatest performance level improvements in both literacy and numeracy. This may be attributed to the implementation of a LitNum strategy of the province, as described below (Western Cape Education Department, 2006). Other than the Free State and the Northern Cape which exhibited gains in both literacy and numeracy, the scores of the other provinces were less consistent, with scores in Limpopo and Mpumalanga falling the most over this period.

¹ In South Africa, in the foundation phase the focus is on developing literacy and numeracy skills of learners where learning is informed by basic concepts to get learners ready for learning language and mathematics from grade 4 onwards.

TABLE 1

AVERAGE PERCENTAGE SCORES ATTAINED IN THE GRADE 3 AND GRADE 6 SYSTEMIC EVALUATIONS

	GRADE 3		GRADE 6
	2001	2007	2004
Literacy Reading only	30%	36%	
Numeracy	35%	26%	
Life Skills	54%	-	
Language (of Teaching and Learning)			38%
Mathematics			27%
Natural Sciences			41%

SOURCE : DEPARTMENT OF EDUCATION, 2009.

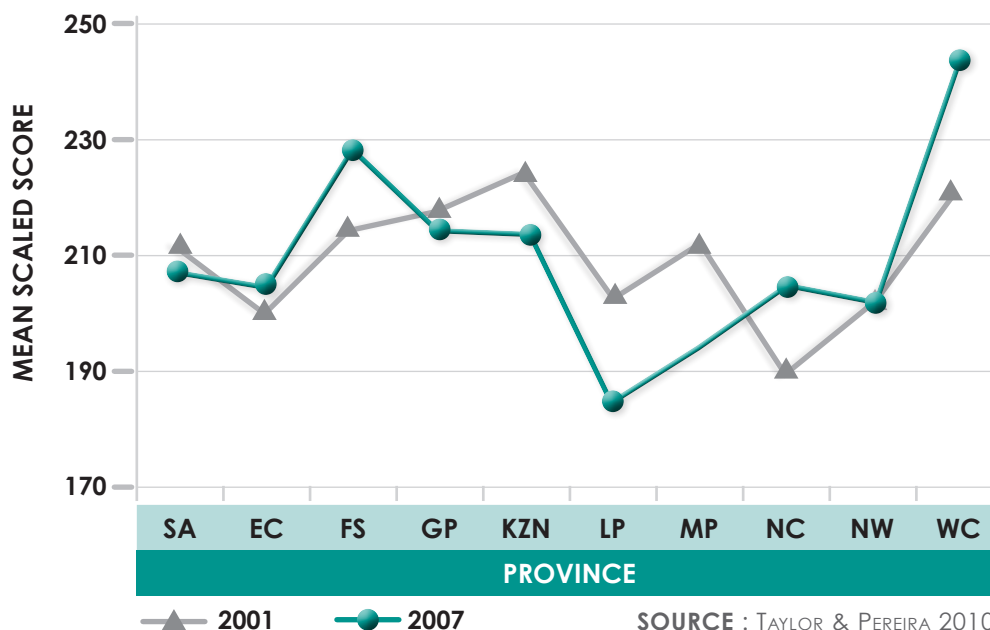
The poor performance of learners in the grade 3 and grade 6 tests resulted in the then minister of education, Naledi Pandor, launching the Foundations for Literacy Campaign (FLC) in 2008 (DoE, 2008).

The FLC aimed to improve learner performance in reading, writing and numeracy across all grades in the general education band (grades R – 9) so that all learners achieved a solid foundation for learning. Interventions to achieve this goal comprised a multi-pronged strategy including promoting teacher development, supplying

learning materials and resources, regular assessment, and providing school support at local levels. The FLC acknowledged government’s primary role in mobilising all South Africans to engage in literacy and numeracy developments. A further element of the FLC was the establishment of improvement targets for 2011: all primary schools were expected to increase average learner performance in literacy/language and numeracy/mathematics from 2008 to 2011 to no less than 50%². The 2011 ANA was the first determinant of the outcomes of FLC activities.

FIGURE 1

PERFORMANCE LEVELS IN GRADE 3 LITERACY IN THE SYSTEMIC EVALUATION ACHIEVEMENT TEST BY PROVINCE, 2001 & 2007

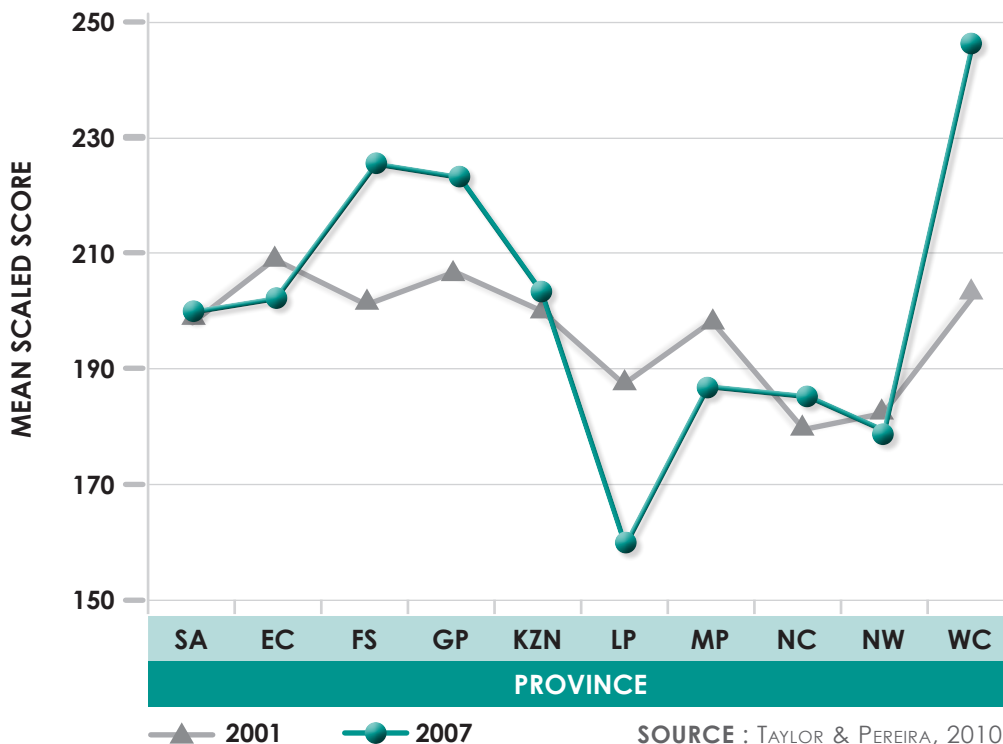


SOURCE : TAYLOR & PEREIRA 2010.

² It is interesting to note that these efforts to improve performance levels through teaching and learning do not include any accountability system for schools to adhere to, and as such, any targets that are set may have minimal impact. (See comments made by the former Director General of education, Duncan Hindle, Mail & Guardian, 2/09/2011.)

FIGURE 2

PERFORMANCE LEVELS IN GRADE 3 NUMERACY IN THE SYSTEMIC EVALUATION ACHIEVEMENT TEST BY PROVINCE, 2001 & 2007



Report on the 2011 Annual National Assessment

In February 2011, the ANA involved the testing of all learners in public schools in grades 2 to 7, that is, almost six million learners, the focus being on the levels of learner performance in the previous year, in other words in grades 1 to 6 (Department of Basic Education, 2011).

In 2008 and 2009, trial runs of the ANA were conducted, largely with a focus on exposing teachers to better assessment practices. In addition, standardisation procedures employed would enable the data from the 2011 ANA to become the baseline for future comparisons and allow provinces and districts to target support effectively to schools and districts in the foundation and intermediate phases. (see table 13 in article by Monica Bot.)

The DBE noted that the inter-provincial results suggest that there is room for greater standardisation of tests, as the outcomes for the Eastern Cape’s grade 3 performance are considerably higher than one would expect, given this province’s performance in earlier assessments. To some extent, the same can be said of the KwaZulu-Natal results.

The impact of poverty on attainment

The ANA report noted that the greatest need for support lies in the poorest 40% of schools which are located largely in the poorest and rural communities. Recent studies have illustrated that the impact of poverty on schooling is

nanced and complex; vulnerabilities arise from a range of factors such as health and nutritional status, access to services and facilities in addition to economic constraints (Fleisch, Shindler & Perry 2009).

Even though economic status affects educational attainment levels within SA, Professor Servaas van der Berg and economics researcher Nic Spaull point out that poverty cannot be the only reason for our weak educational performance. In tests conducted in 15 sub-Saharan countries in 2007 by the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ), South Africa ranks 10th out of 15 for grade 6 reading and 8th for grade 6 maths – behind countries such as Tanzania, Kenya, Swaziland and Zimbabwe where children experience worse levels of poverty than in SA (Mail & Guardian, 8/4/2011; Spaull, 2011).

Addressing poor attainment levels

For the DBE, continuing poor attainment levels point to the shortcomings of its approach to improve attainment levels in literacy and numeracy, signaling the need for far-reaching actions. It responded to this challenge in 2011 by introducing a multi-pronged intervention that includes curriculum changes (providing for more time for literacy/ languages and numeracy/mathematics); workbooks for six million learners; learner packs for teachers aligned with the Curriculum and Assessment Policy Statements; workbooks for learners in grades 7-9 in 2012; changes in regulations relating to mother tongue instruction and the languages of learning and teaching and the numbers of subjects taught

during the primary phase. In addition the department plans intensive teacher development programmes, aligned with the Integrated Strategic Planning Framework for Teacher Education and Development announced in 2011 (DBE and DHET, 2011). These programmes will cover content knowledge and English language skills of teachers whose mother tongue is not English.

Deadlines for the production of the workbooks are tight and publishing houses reported that they had been given only six months to develop textbooks for 2012, even though it normally takes about 18 months to develop the content of a high quality textbook (The Times, 21/2/11).

Government's response also includes plans to enhance and expand early childhood education and grade R provision, supporting the objective of laying solid foundations for learning from an early age. The 2012 ANA will monitor the short-term impact of these interventions.

Although the ANA provides valuable information on current attainment levels, further development in standardising data across and within provinces and across grades is needed to improve the comparative and diagnostic potential of the tests.

A PROVINCIAL FOCUS: THE WCED'S LITNUM STRATEGY

Responding to a poor literacy environment

The Western Cape's (WC) literacy and numeracy programme in foundation phase classes developed prior to the implementation of the FLC was an integral part of its Provincial Growth and Development Strategy (PGDS), entitled '*iKapa Elihlumayo*/'the Growing Cape' (WC Provincial Government, 2006). Its vision commits provincial government to achieve three primary goals:

- to build the social capital of the province;
- to build the human capital; and
- to ensure economic growth and participation in the economy by the people of the province (Gordon & Bot, 2008).

The WCED LitNum Strategy (2006 – 2016) is seen as an important element of the goal to build the human capital of the WC. The need for a special focus on literacy and numeracy arose from the poor showing of most learners in tests conducted by the WCED in 2001 of its grade 3 and 6 learners (Western Cape Education Foundation, 2008).

The WCED's LitNum strategy defined three areas of improvement on which each district was required to focus: teacher development and support; the provision of resources and learning materials; and research and advocacy. Within this framework, however, districts would be free to adopt different approaches to implementation

in response to how they defined their schools' needs. Strengthening district level support was done to allow the district officials to develop support systems aligned to the needs of schools and communities. A Provincial Literacy and Numeracy Coordinating Committee was set up to create accountability and integration for implementation across the province.

Project operations were driven forward at district level by project 'champions', usually district managers and circuit team managers. They were appointed to sustain the project once service providers had completed their work with schools, so that the province's head of the LitNum Strategy had the ability to drive forward the implementation. Other departmental activities in the foundation phase of learning are:

- monitoring classroom practice in grades 1-3;
- providing additional resources into the foundation phase, including the allocation of teacher posts and the building of relief classrooms to reduce learner numbers in classes in these grades;
- distributing a guide to all parents whose children entered grade 1 on the kind of support they can provide to ensure that their children's school careers are successful; and
- providing a mathematics textbook for learners in grades 2-7.

On completion, the intervention will have engaged with 1 050 schools.

WCED standardised test results

Released in 2011 (Western Cape Education Department, 2011), the results of the 2009 and 2010 WCED standardised tests for grades 3 and 6 learners illustrate substantial gains in numeracy/mathematics and some gains in literacy/languages (see tables 2 and 3).

Learner performance significantly improved at the grade 3 level, most especially in the field of numeracy, exceeding the target of 40% for numeracy and reaching the target of 55% for literacy. The WCED points out that the following interventions have led to these improvements in numeracy performance:

- Some districts have, together with their educators, set appropriate level tests that are regularly administered every two weeks and have been used by all the schools in each circuit/district. This has enabled learners and educators better to understand the performance required by them and to practise answering tests of this nature.
- Compulsory daily mental maths sessions have been instituted over the past two years.
- A focus on the protection of teaching time from any form of outside interference (Western Cape Education Department, 2011).

Regarding literacy, the department maintains that the lower rate of improvement in grade 3 literacy can be

TABLE 2

GRADE 3 STANDARDISED TEST RESULTS IN THE WESTERN CAPE, 2009 & 2010

	NUMERACY (%)		LITERACY (%)	
	PASS RATE	AVERAGE	PASS RATE	AVERAGE
2009	35,0%	39,5%	53,5%	50,5%
2010	48,3%	48,0%	54,9%	50,7%
Change 2010/2009	+13,3%	+8,5%	+1,4%	+0,2%

SOURCE : WESTERN CAPE EDUCATION DEPARTMENT, FEBRUARY 2011.

explained by the fact that literacy has increased strongly over the last few years. Literacy is now at a higher base and larger increases become more difficult and will require sustained and focused effort.

WCED targets of a 15% and 45% pass rate in mathematics and languages respectively were exceeded for grade 6 learners, as shown in table 3.³

Evaluation of the LitNum strategy

An evaluation of the LitNum strategy conducted by JET Education Services began in 2009 with a baseline study (Taylor & Pereira, 2010) and follow-up testing scheduled to take place from 2010 – 2012 (Pereira et al, 2011). This evaluation aims to assess the implementation process and the impact of the intervention on various aspects of the strategy, including the management of operations in the province and district, on-site district support, its impact on achievement levels, a review of training materials, and various classroom practices, such as time management, resource management, the use of appropriate methodologies and assessment strategies. JET used its own literacy/language and numeracy/mathematics tests for grades 1, 2, 4 and 5 and the achievement tests developed by the WCED for grades 3 and 6.

Table 4 illustrates that while the number of grade 3 and 6 learners achieving a 50% score in literacy and language

improved since 2002, the numbers were lower for numeracy and mathematics, and more so in grade 6. Of great concern is that proficiency rates in grade 6 were substantially lower than those in grade 3. The evaluators concluded that a significant number of grade 3 and grade 6 learners were a year behind their expected attainment levels and this time-lag increases to two years after two or three years. In fact proficiency levels show most learners faced acute problems in both learning areas, but particularly in numeracy and mathematics, as indicated in table 5. The implication of this is that if learners proceed to the next grade, teachers have to fill in the gap in knowledge and skills for previous grades whilst also trying to achieve curriculum coverage for the current grade.

Table 5 presents the percentage of learners attaining a score of 50% or more. Even though tests across grades were not scaled to a common measure, and therefore differences in scores across grades do not necessarily indicate declining or improving performance, the authors concluded that:

“... given the size of the decline in proficiency over the first five grades of the primary school, it would appear that children fall progressively behind in terms of mastering the curriculum standards as they move up the grades. It is clear that very significant numbers of learners from grade 1 are at least behind curriculum expectations, and after two to three years large numbers of learners are at least two years behind”

(Taylor & Pereira, 2010: 35-6).

TABLE 3

GRADE 6 MATHEMATICS AND LANGUAGE TEST RESULTS, WESTERN CAPE, 2009 & 2010

	MATHEMATICS		LANGUAGE	
	PASS RATE	AVERAGE	PASS RATE	AVERAGE
2009	17%	32%	49%	48%
2010	24%	39%	52%	51%
CHANGE 2010/2009	+7,0%	+7%	+3%	+3%

SOURCE : WESTERN CAPE EDUCATION DEPARTMENT, FEBRUARY 2011.

³ Grade 6 results were issued with a cautionary note: Results in grade 6 from 2009 to 2010 cannot be accurately compared as the test instrument was extensively revised during this time to ensure that the test was reflective of changes in the curriculum and was of the right level of cognitive demand.

TABLE 4

WCED PROVINCIAL TEST SCORES: MEAN PROPORTION OF LEARNERS ACHIEVING 50%

YEAR	GRADE 3				GRADE 6		
	2002	2004	2006	2008	2003	2005	2007
Literacy/Language	35,7%	39,5%	47,7%	53,5%	35%	42,1%	44,8%
Numeracy/Mathematics	37,1%	37,3%	31,0%	35,0%	15,6%	17,2%	14,0%

SOURCE : TAYLOR & PEREIRA, 2010: 7.

The evaluation also provides diagnostic information regarding learner difficulties in specific curriculum areas. For example, learners coped well with pre-writing activities but struggled to make meaning of visual or verbal texts. In numeracy/mathematics, learners encountered difficulties with calculations comprising two- and three-digit numbers. Accordingly, these findings may usefully inform the department and teacher training institutions on the content of teacher pre- and in-service programmes.

AN INTERNATIONAL COMPARATIVE STUDY

Due to its improved literacy and numeracy results, the Western Cape was included in an international study that compared policies across selected countries that succeeded in creating 'pathways of success'. The McKinsey report (Mourshed, Chijioke & Barber, 2010) examined 20 educational systems in action, sorting them according to two criteria, that is, starting points and progression. The research team selected school systems in both developed and developing countries, focusing on school systems that managed to show sustained improvements over a few years. The research examined the interventions made in the groups that advanced from poor to fair, fair to good, good to great, and great to excellent. The Western Cape was included in the analysis as a case study in a country which has not as yet reached high attainment levels, but has embarked on a large-scale reform journey to remedy poor literacy and numeracy achievement levels, a common characteristic of systems that are moving from poor to fair.

Findings reveal particular features of successful school systems across all the achievement levels and clusters of

intervention, which differ according to the starting point of the system – a weak, average or intermediate base or a strongly achieving system that has already demonstrated success. We present the findings on key elements of change and then focus specifically on how the Western Cape is in the process of improving its system from poor to fair.

Key elements of change

Two key factors dominate the creation of successful systems: first, clear goals and strategies that are understood by all parties, and second, a coordinated and integrated process of change. Having accomplished this, the leaders of the strategies and programmes are then able to act. Common to all improving systems, even those where starting points are dismal, are leaders who are able to articulate their specific strategies that have led to systemic improvements. They are clear about their aims and intentions and how they plan to get there.

In some cases, as in the Western Cape, the educational strategies are intended to meet transformational goals. For example, the WCED's LitNum Strategy was created as a key element in the province's aim of ensuring a more equitable human capital development programme. To achieve this improvement, the WCED identified and developed strategies to support the lowest performers and improve outcomes. In brief, the WCED combined data on school performance with geographic information in order to identify specific communities with performance challenges. This has enabled officials to understand the specific local needs of those communities and tailor support accordingly. They then interact with parents or

TABLE 5

% LEARNERS IN WCED SCHOOLS OBTAINING AT LEAST A 50% SCORE ACCORDING TO CURRICULUM SPECIFICATIONS, BY GRADE 1, 2, 4 & 5, 2009

	GRADE			
	1	2	4	5
Literacy/Language	50%	34%	11%	9%
Numeracy/Mathematics	11%	11%	4%	12%

SOURCE : TAYLOR & PEREIRA, 2010: 35.

district offices. WCED officials spend three days annually with each of the eight districts in the province to review school performance data, to speak to the district leaders and parents, and to visit the highest and lowest-performing schools in the district.

Instructional leadership in some countries is provided from the centre – the ministry or provinces. For example, some countries that moved from poor to fair were found to make use of prescriptive teaching materials that guide teachers and workbooks for learners. South Africa is now following this route as workbooks and teacher guides are being disseminated from the national department to schools across the country.

Middle layers provide targeted support to schools, parents and communities

The McKinsey report found that many systems have well-developed 'middle layers', such as district offices in South Africa or school boards in Canada. Exactly what support is provided and how each mediating layer achieves this support varies somewhat between systems. In the Western Cape, districts have cross-functional circuit teams that provide improvement support to schools (literacy advisers and curriculum coordinators, as well as administrative support) and that are able to identify locally specific issues and develop locally tailored solutions (Mourshed et al, 2010: 95).

In the countries studied, the middle layer was found to play an important role in delivering and sustaining improvement by opening up channels for communication and offering support between the schools themselves and from the schools to the centre. In the Western Cape, district level Literacy Coordinators are close enough to schools to identify problem areas and disseminate findings to the senior provincial leadership. Coordinators meet routinely with their circuit and district teams and quarterly with the Provincial LitNum Coordinating Committee to develop solutions to the challenges the schools face and share approaches about what they find works effectively in schools. One Western Cape Literacy Coordinator described how this works in practice: 'If I hear about something good going on in a school, I will go visit it. After I see it, I may tell the provincial Deputy Director General about it and I will share it with the Provincial Coordinating Committee. That way it gets to the top and to others who can use it.' (Mourshed et al, 2010: 97).

The district officials also cultivate parental support by encouraging parents from low-income rural districts to engage in literacy activities. For instance, the WCED conducts a road show in districts where literacy levels are low to share system performance data with parents and to let them know about subsequent district activities; its literacy coordinators bring parents together to jointly 'write a story' that the parents then memorise and 'read' to their children. 'The district office.... may contact farm owners to encourage them to allow farm workers time

off to meet their children's teachers.' (Mourshed et al, 2011: 93).

In the classroom

The WCED has implemented a number of activities at school, community and classroom levels such as:

- Ensuring work schedules and pace setters include daily routines for numeracy specifically for the Foundations for Learning campaign;
- Providing increased instruction time for literacy and numeracy. The WCED mandated 30 minutes a day for pleasure reading as part of its literacy improvement strategy.

Poverty-related interventions

McKinsey's comparative findings illustrate that closing the achievement gap between rich and poor communities commonly requires further interventions that relate to poverty. In the Western Cape, as in the rest of SA, the School Feeding programme provides free school meals to learners, albeit with varying levels of effectiveness and efficiency. There are also many transport schemes operating throughout the country for learners living in isolated communities and on farms.

Rewarding success

The WCED, along with other systems that are succeeding, rewards primary schools whose performance improved in the 2010 grade 3 and 6 literacy and numeracy assessments. Some awards recognise social and economic context, identifying schools that have shown progress and improvement according to the national quintiles.

Extra-mural literacy and numeracy programmes

Many small scale interventions (province and non-government organisations) operate that focus on improving literacy and numeracy in disadvantaged schools. For example, the Student Prince Pep Academies, active at a few Tygersig schools, involves a nutrition and academic programme. In this programme, grade 4 learners from feeder schools congregate at Tygersig Primary in Uitsig for extra maths and literacy lessons three afternoons a week conducted by the Maths Centre for Professional Teachers, an NGO based in Johannesburg. School teachers in this programme are given training informed by constructivist methodologies that may be employed in their classrooms (Social Innovations, 2009; 2010). Other literacy and numeracy programmes include the READ literacy programme, Family Literacy Project, and Project Literacy.

To sum up, the findings of the McKinsey report illustrate that successful interventions leading to improved levels of

literacy are multi-pronged and layered, reaching education officials at all tiers of government, teachers as well as the broader school community.

CHALLENGES

Introducing national assessments has opened up a new challenge: how to prepare teachers to use the assessments productively. A potential pitfall is that the current focus on assessment may undermine classroom diagnostic work as large-scale testing says nothing about why children do not succeed, or what teachers think about how children learn number, and why children fail to do so. In fact standardised assessment can only indicate how poorly learners are doing and this must be followed up with teachers' diagnostic assessments and remedial action (Ensor, Hoadley, Jacklin, Kühne, Schmitt & Lombard, 2008/09).

This requires that teachers are knowledgeable of their particular learning areas, which may not often be the case. Peter Kallaway and Rob Siebörger comment in a recent article in the Cape Times: '... the core of the problem lies in shortcomings relating to the fact that the actual knowledge base of teachers is often very poor ...' we do not so much need courses in school or classroom management as substantial academic training by experts for all teachers who already hold teaching certificates of one kind or another' (Cape Times, 1/8/11).

A further question is whether we can in fact create an assessment programme mandated from the centre that can cope with the diverse and inequitable range of schools in South Africa. A pertinent example is that of language testing which must rest on an informed argument about the use of language in communities and at schools. For example, standard varieties of vernacular languages may be very different from dialects spoken by learners. Further, schools do not represent homogenous language groupings (Foley, 2009), and practical challenges for teaching and learning in general and assessment in particular will arise where there are more than two languages spoken in a school.

Finally, we quote Diane Ravich, who warns against the (over)emphasis of test scores as a measurement of a learner's achievement in the USA today. Wherever there are disparities in performance, particularly those arising from poverty and race, there is a danger of exclusion arising from damning test scores:

"When test scores become the goal of education by which students and schools are measured, then students in the bottom half—who will inevitably include disproportionate numbers of children who are poor, children with disabilities, children who barely speak English—will be left far behind, stigmatized by their low scores"

(New York Review of Books, 29/10/2011).

REFERENCES

DEPARTMENT OF BASIC EDUCATION (2011)

Report on the annual national assessments of 2011. Pretoria.

DEPARTMENT OF BASIC EDUCATION AND THE DEPARTMENT OF HIGHER EDUCATION AND TRAINING (2011)

Integrated strategic planning framework for teacher education and development. Pretoria.

DEPARTMENT OF EDUCATION (2008)

Foundations for learning campaign 2008–2011. Government Gazette 30880, No. 306, 14 March 2008.

DEPARTMENT OF EDUCATION (2009)

Trends in education macro indicators report, 2009 South Africa. Pretoria.

ENSOR P, HOADLEY U, JACKLIN H, KÜHNE C, SCHMITT E & LOMBARD AP (2009)

Count one count all: Numeracy in the foundation phase. In: South African child gauge 2008/2009. Pendelbury, S., Lake, L. & Smith C., [Eds.]. Cape Town: Children's Institute, University of Cape Town.

FLEISCH B, SHINDLER J & PERRY H (2009)

Who is out of school? Evidence from the Community Survey 2007, South Africa. Paper presented at the UKFIET Conference, Oxford University, United Kingdom, 15-17 September 2009.

FOLEY A (2009)

Mother tongue education in South Africa. English Academy Website <http://www.englishacademy.co.za/pansalb/education.pdf>. [Retrieved 17 August 2011].

GAUTENG EDUCATION DEPARTMENT (2011)

Implementation of the Gauteng Primary Literacy Strategy. Circular 3/2011, 12 April 2011. http://www.education.gpg.gov.za/legislation/circulars/2011_circulars/Circular_03_of_2011.pdf. [Retrieved 17 August 2011].

GORDON A & BOT M (2008)

Priorities and challenges facing the WCED. Cape Town: Western Cape Education Department.

MOURSHED M, CHIJOKE C & BARBER M (2010)

How the world's most improved school systems keep getting better. London: McKinsey & Company.

PEREIRA C, HERHOLDT R, SMITH L, ZUZE L & TAYLOR N (2011)

Western Cape Education Department Literacy and Numeracy Intervention: Interim study. Johannesburg: JET Education Services.

SOCIAL INNOVATIONS (2009)

Student Prince Academy programme evaluation. Johannesburg: Social Innovations.

SOCIAL INNOVATIONS (2010)

Student Prince Academy programme evaluation. Johannesburg: Social Innovations.

SPAULL N (2011)

A preliminary analysis of SACMEQ III South Africa. Stellenbosch Economic Working Papers: 11/11. Stellenbosch: Department of Economics and Bureau for Economic Research, University of Stellenbosch.

TAYLOR N & PEREIRA C (2010)

Western Cape Education Department Literacy and Numeracy Intervention: baseline study. Johannesburg: JET Education Services.

WESTERN CAPE EDUCATION DEPARTMENT (2006)

Literacy and numeracy strategy 2006 – 2016: A strengthened, co-ordinated and sustainable approach. Cape Town: WCED http://wced.school.za/documents/literacy_numeracy_strategy/e-LitNumStrat.pdf. [Retrieved 14 August 2011].

WESTERN CAPE EDUCATION DEPARTMENT (2011)

Western Cape Education Department Releases 2010 Literacy and Numeracy Results 28 February 2011. http://www.westerncape.gov.za/eng/your_gov/3576/news/2011/feb/213538: [Retrieved 11 August 2011].

WESTERN CAPE EDUCATION FOUNDATION (2008)

WCED's Literacy and Numeracy Strategy. WCEFNews, 2: 3 <http://wced.school.za/wcef/news/WCEFnews-2-May08.pdf> [Retrieved 11 August 2011]

WESTERN CAPE PROVINCIAL GOVERNMENT (2006)

iKapa Elihlumayo: Western Cape provincial growth and development strategy. Provincial Gazette, 6385, 4 October 2006.

South Africa's Further Education and Training College Sector at a Glance

Bina Akoobhai, Anthony Gewer, Jennifer Shindler

BACKGROUND

It is generally agreed by both local business and the international community that the lack of an effective skills supply represents the biggest threat to sustained economic growth in South Africa. This is confirmed through at least two surveys of business: the survey of manufacturing firms by the Bureau for Economic Research, which cites poor skill supply as the 'most debilitating constraint on activity' (quoted in World Bank, 2011: iv), and the Grant Thornton's 2009 International Business Report which found that 41% of South Africa's privately held business agreed with the assertion that the availability of a skilled workforce was the biggest constraint to business growth (Grant Thornton, 2009). The reasons are two-fold – poor foundational literacy and numeracy competencies, and the lack of capacity of current vocational institutions to deliver programmes that meet the needs of SA's economy.

Government's response has comprised both systemic and policy changes. The Department of Higher Education and

Training (DHET) was created in 2009, and for the first time higher education and skills development were located under one political and administrative roof. With the establishment of the DHET, the skills development sections of the Department of Labour were combined with the Further Education and Training (FET) college subsystem that was previously the responsibility of the provincial education departments under the previous Department of Education. This 'merged the institutions that interpret demand with the supply side of skills' (World Bank, 2011: 56), and provided the basis for a more coherent response to this crisis.

This article looks at the part of the education and training system that is responsible for supplying vocationally-oriented skills training, particularly FET colleges. After looking at the structure of the technical and vocational education system, the article describes the key policy developments in this sector, looks at the demand for

this type of education, and finally looks at access and throughput in Further Education and Training colleges.

STRUCTURE OF THE TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING SYSTEM

The technical and vocational education and training sector in South Africa is characterised by a mix of both formal and non-formal programmes and delivery sites. This system comprises public and private colleges, private training providers (including in-house company training centres), the Sector Education and Training Authorities (SETAs) and the National Skills Fund (NSF) (Gewer and Elliot, 2011). Parts of this sector form part of the secondary school system, while other parts lie outside the school system and below the university system. Non-formal training comprises apprenticeships, learnerships and short skills programmes.

Table 1 illustrates the current mix of programmes and delivery sites available for the supply of technical and

vocational skills. According to Gewer and Elliot (2011), technical high schools have not been given much attention, but do have the potential to play an important role in the pipeline of skills to post-schooling vocational or occupational training. FET colleges straddle the general vocational and occupational streams, although delivery in colleges is primarily in the realm of general vocational programmes.

The National Certificate (Vocational) (NCV) was introduced in 2007 to provide a sound foundation in general vocational knowledge and skills across a range of fields of learning. It runs parallel to the last three years of ordinary (academic) secondary schooling, and is aimed primarily at pre-grade 12 school leavers who wish to follow a vocational learning pathway. It culminates in a level 4 qualification on the National Qualifications Framework as it is designed to be an alternative to the academic National Senior Certificate (NSC). Currently most students who take the NCV have already passed the NSC (Gewer, 2010), which raises issues around the particular target market that the NCV attracts and the role that it plays.

Also partly in parallel and partly beyond the NCV are the NATED or 'N' programmes (also known as Report 190 and

TABLE 1

TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING PROGRAMMES AVAILABLE

Stream	GENERAL ACADEMIC	GENERAL VOCATIONAL	OCCUPATIONAL
Programmes	National Senior Certificate (NSC)	National Certificate Vocational (NCV) and NATED ('N') programmes (N1-N3)	Learnerships, Apprenticeships and Skills Programmes
Institution	Technical High Schools	FET colleges (public and private)	Theoretical component offered by colleges and private providers Practical learning offered in the workplace
Target Groups	Scholars: Post-Grade 9's	School leavers: Post-Grade 9's (NCV) and Post-Grade 12's (N4-N6)	School leavers: Post-Grade 9's, Employed & unemployed, especially youth
Theory / Practical / Workplace	Theory and Practical in workshops No workplace learning	NCV – Theory and Practical in Workshops N Programmes– Theory and practical in workshops No workplace learning (though some access to workplace exposure)	Learnerships and Apprenticeships – Theory in college/private provider & practical on-the-job training Skills Programmes – integrated modules & practical/ workplace learning

SOURCE : GEWER AND ELLIOT, 2011: 6-7.

191 programmes) offered to apprentices as the theory component of their path to artisanship (N1-N3) and advanced technical careers (N4-N6). The introduction of the NCV in 2007 coincided with the proposed phasing out of these 'N' programmes as they had lost much of their relevance to the modern world of work (Gewer and Elliot, 2011: 3). However, the decline in supply of graduates due to the introduction of the three-year NCV, and the fact that the NCV was not designed to provide theory to apprentice artisans combined with persistent demand for 'N' programmes from both employers and learners, compelled the Minister of Higher Education and Training to withdraw the phasing out of the 'N' programmes while a curriculum review of college programmes takes place.

Occupational training has primarily been the domain of private training providers and training centres within industry. Occupational training is funded through the SETAs via the skills levy system and is targeted predominately at developing the existing workforce rather than unemployed or pre-employed youth. While some FET colleges are involved in learnership delivery, many of the colleges are not necessarily accredited to offer these programmes across different sectors. As of 2011, colleges had only 16 000 learners in learnerships and 32 480 learners in skills programmes (figures provided by DHET).

CURRENT POLICY DEVELOPMENTS

In January 2010, the cabinet announced 12 Outcomes that would drive government planning over the next 15 years. Post-schooling provision, from a policy perspective, is driven by Outcome 5: A skilled and capable workforce to support an inclusive growth path. In this regard the DHET has adopted a strategic plan which consists of five outputs to achieve this outcome (Department of Higher Education and Training, 2011a and 2011b). Two of the outputs in particular relate to post-school provision.

Output 2: *Access to programmes leading to intermediate and high level learning.* According to the DHET (2011b: 18), this output is aimed at those adults and youths who wish to enter post-school programmes but do not meet the entry requirements for these programmes. This includes those who dropped out of school before they completed grade 12 as well as those who completed grade 12 but did not achieve the necessary pass rate. It also addresses the needs of young people who take a conscious decision at an early age that they need to study towards a vocational qualification with some foundational preparation for the world of work and a possibility of pursuing higher education studies. This output has four sub-outputs (DHET, 2011b: 18):

- Increase the number of Adult Basic Education and Training (ABET) level 1-4 learners from a baseline of 269 229 to 300 000 per annum;
- Improve the success rate of enrolled NCV learners, as part of the massification of the programme;

- Create matric equivalent second chance programmes for youth and adults who do not hold a national senior certificate;
- Expand the range of learning options for those with matric who do not meet university entrance requirements.

Output 3: *Access to occupationally directed programmes.* According to the DHET (2011b: 19), this output seeks to address the problem of identified critical skills shortages focusing on intermediate level skills, especially artisanal skills. The aim is also to foreground experiential learning as intrinsic to enhancing the employability of college graduates. This output has six sub-outputs (DHET, 2011b):

- Increase the number of learnerships to reach 20 000 per annum by 2014;
- Increase the number of qualified artisans being produced to 10 000 per annum by 2014;
- Improve the trade test pass rate from 46% in 2009 to 60% by 2014;
- Increase the rate of learners from NCV and 'N' programmes in workplace experience placements so that they can take trade tests or other occupational summative assessments. (At least 70% of learners should have placement every year);
- Establish a system to distinguish between learnerships up to and including level 5, and level 6 and above; and
- Increase the proportion of unemployed people, as compared to employed people, entering learnerships from 60% to 70%.

In order to address the skills supply gap, the strategic plan (DHET, 2011a: 19) emphasises the need to assist students and learners to move between learning and work. The plan notes that the skills levy funds will be used to incentivise firms to open up structured workplace learning for college students as well as for university and university of technology students. State-owned enterprises and other large employers will have a special role to play in this regard.

There are several key initiatives underway aimed at enhancing the pipeline of skills.

There is a strong drive from the DHET to strengthen the FET college sector by supporting the development of more effective management and funding by shifting to programme-based funding, linking funding to outputs, and making colleges more accountable for their budgets (Gewer and Elliot, 2011: 14). The mechanisms for this are rooted in the Norms and Standards for Funding of FET colleges, through which the DHET determines yearly budget allocations (based on projected enrolments), monitors both budget expenditure and performance (through regular college reporting), and enforces compliance with meeting targets for both budgets and performance through a clawback mechanism (where funding can be reclaimed if targets are not met) (RSA, 2009).

There has also been a strong response by industry to the severe shortfall in artisan development that gained prominence through the Joint Initiative for Priority Skills Acquisition (JIPSA). Certain large industries have responded by committing to train large numbers of additional artisans for the national pool. The five largest construction companies have engaged with the DHET to enhance the supply of construction skills through FET colleges. The steel industry has designed and rolled out an Accelerated Artisan Training Programme (AATP) by taking on young learners who have a foundation in engineering theory, and fast-tracking their specialised and workplace training so as to ensure productivity within 18 months rather than the traditional four years. As of 2010, this accelerated version had registered 2 741 apprentices and 837 have qualified as artisans. More recently, the National Artisan Development Programme, launched under the auspices of the National Artisan Moderating Body (NAMB), is targeting the enrolment of 27 000 learner-artisans in the 2011/12 and 2012/13 financial years respectively, and is committed to provide 50 000 competent artisans by 2015. These targets are in support of the National Growth Path and include a substantive focus on increasing artisan training in state-owned enterprises (DHET, 2011d).

The Quality Council for Trades and Occupations (QCTO) was launched in 2010 (DHET, 2011a: 43) in place of the standards generating bodies and the various SETA Education and Training Quality Authorities (ETQAs) (World Bank, 2011: 58). The QCTO will supervise the process of the generation of occupational qualifications and ensure minimum standards among training providers (World Bank, 2011: 58). According to the World Bank report on *Closing the skills and technology gaps in South Africa (2011: 58)*, the QCTO has developed a set of proposals relating to the development of qualifications and curricula, and has set a target of fast-tracking the development of a core set of 12 artisan qualifications.

The third phase of the National Skills Development Strategy (NSDS-III), released in February 2011, is another development, and places particular emphasis on FET colleges becoming critical partners in the delivery of programmes that prepare young people for access to training in the workplace, either as part of or after the completion of a qualification (DHET, 2011c). This requirement positions colleges to expand their contribution to the talent pool, if they can convince the private sector that their delivery is in line with industry requirements. The NSDS-III also requires SETAs to set aside 10% of their mandatory grant to fund workplace learning opportunities (through learnerships, apprenticeships and internships) (DHET, 2011c: 14).

SIZE OF THE POST-SCHOOL YOUTH COHORT

Gewer and Elliot (2011: 1) estimate that around one million young people exit the schooling system annually, 65% of whom have not successfully attained a grade 12

certificate. About 160 000 people gain entry to higher education institutions annually (this applied to 152 000 students in 2008 and 165 000 in 2009 (Taylor, 2011: 25). Therefore, there is an annual figure of around 840 000 school leavers that must be catered for by the non-higher education system. Consequently, there is pressure on FET colleges to expand their enrolment. The 2008 National Plan for FET colleges set a target of expanding enrolment in FET colleges to one million by 2014 (Department of Education, 2008), and this was reiterated in the DHET Strategic Plan (Department of Higher Education's, 2011a). Despite budgetary constraints, the DHET sought to ensure that enrolment in FET colleges grew by at least 15% in 2011; colleges were instructed by the DHET not to turn away any students and to find ways to accommodate any student who wishes to study at a college (Gewer and Elliot, 2011: 5). A challenge for the post-schooling non-higher education system, therefore, is the sheer volume of school leavers that it must accommodate each year, and the available capacity to absorb them in terms of recruitment/selection practices, funding and human resources.

RECRUITMENT AND SELECTION

Most FET colleges have ineffective recruitment and selection processes, and tend to enrol learners without due regard to their career aspirations or learning ability. While a standardised competency and placement (CAP) test has been introduced to assess students' interests as well as their language and mathematical ability, the application of the test is not necessarily used effectively either as a diagnostic or placement tool. Gewer and Elliot (2011: 4) note that FET colleges bemoan the negative perceptions among communities and industry regarding their programmes, and that this affects the calibre of students that they attract. Despite this complaint, FET colleges fail to use recruitment and selection processes as a means to filter students into appropriate programmes or to identify and provide the necessary support needed by students to succeed in the programmes (Gewer and Elliot, 2011).

FUNDING

In the 2011/12 financial year, about R4,3billion (Nzimande, 2011) was allocated to FET colleges (2,3% of the total education budget) (Gewer and Elliot, 2011: 4). FET college funding is made through a conditional grant which is tied to the medium-term expenditure framework, which means that the allocation to FET colleges will remain static over a three-year cycle with some provision for inflation (the current cycle runs until 2012/13). This fixed funding basket represents a critical impediment to the expansion of the post-school system, particularly the NCV. The conditional grant makes up 80% of the programme costs per learner in the FET colleges, with the balance being funded through bursaries from the National Student Financial Aid Scheme (NSFAS) and fees. There has been a substantial increase

in the NSFAS allocation for FET college bursaries from around R310m in 2010/11 to R1,25billion in 2011/12 (NSFAS, 2010 and 2011), an increase of 300%, in order to facilitate increased access to FET colleges. However, Taylor (2011: 46) estimates that if the DHET's target is to expand enrolment in FET colleges to one million by 2014, the NSFAS budget would have to be expanded to R3,36billion in 2014.

The theory training for learnerships and skills programmes, which is also provided by FET colleges, is funded primarily through the SETAs or is privately funded by students. In 2011/12, R9,1billion was allocated from the National Revenue Fund to the SETAs and the National Skills Fund, much of which, in the case of the SETAs, is used to fund training in the workplace (Nzimande, 2011). As mentioned above, the NSDS-III requires the SETAs to allocate 10% of their mandatory grant towards a Professional, Vocational, Technical and Academic Learning (PIVOTAL) Grant to fund workplace learning opportunities (through learnerships, apprenticeships and internships) (DHET, 2011c: 14). In addition, the National Skills Fund, which functions as a 'catalytic' fund because it can be used to both initiate as well as to respond to national skill priorities, will support programmes for unemployed youth and other vulnerable

groups (DHET, 2011c: 24). Gewer and Elliot (2011: 4) argue that this requirement places colleges in a position to expand their contribution to the talent pool, if they can convince the private sector that their delivery is in line with industry requirements.

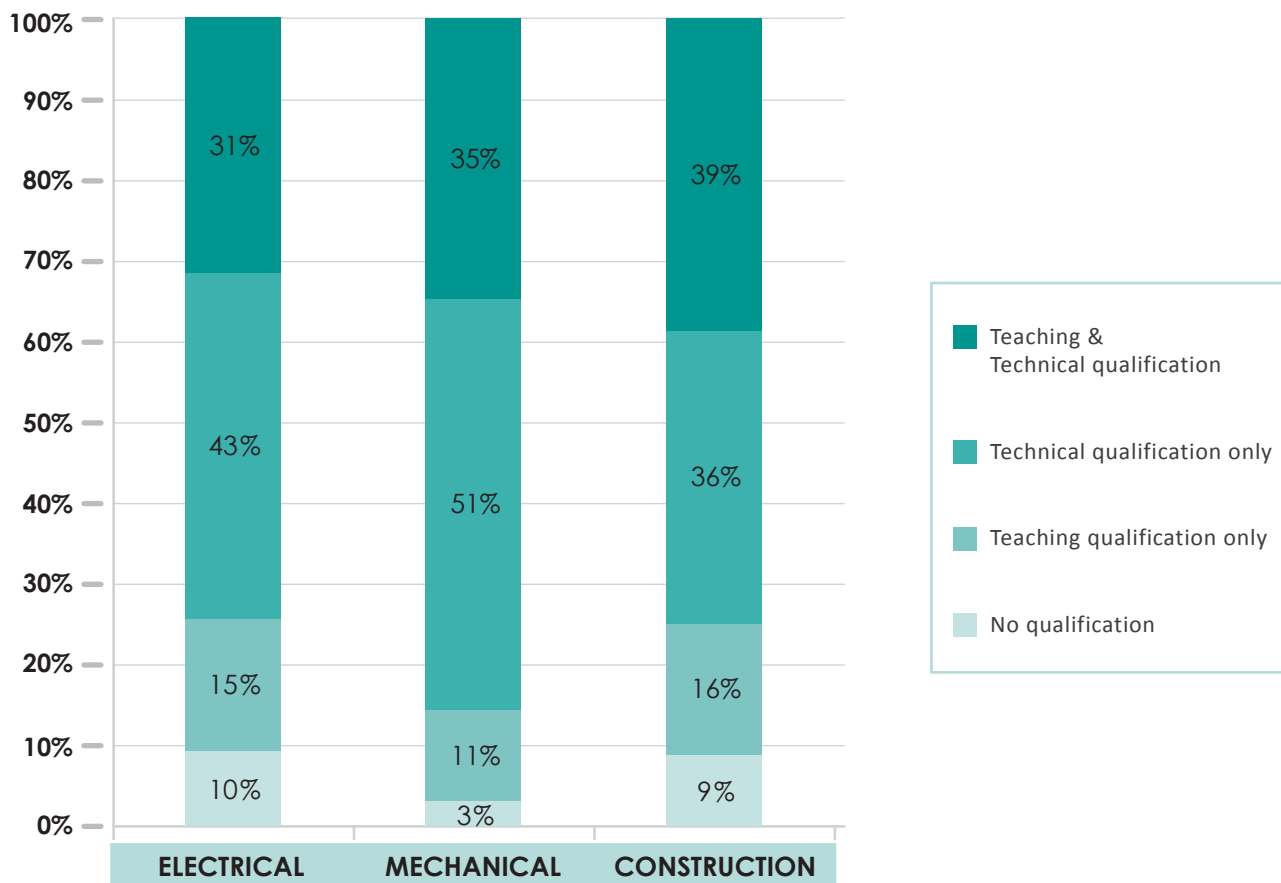
HUMAN RESOURCE CAPACITY

The capacity of FET College staff is considered to be an impediment to the contribution of FET colleges towards effective skills supply (Taylor, 2011: 47). The National Plan for Further Education and Training Colleges in South Africa (Department of Education, 2008: 45) acknowledges that the chances of improving the quality of educational provision at FET colleges is small 'unless the curriculum development process is linked to a national strategy of training college lecturers and ensuring there is a coherent framework of lecturer development'.

A survey of 364 engineering lecturers at FET colleges in April 2011 found that a large number of lecturers did not have a technical or a teaching qualification. As indicated in figure 1, fewer than 40% of lecturers have both a technical

FIGURE 1

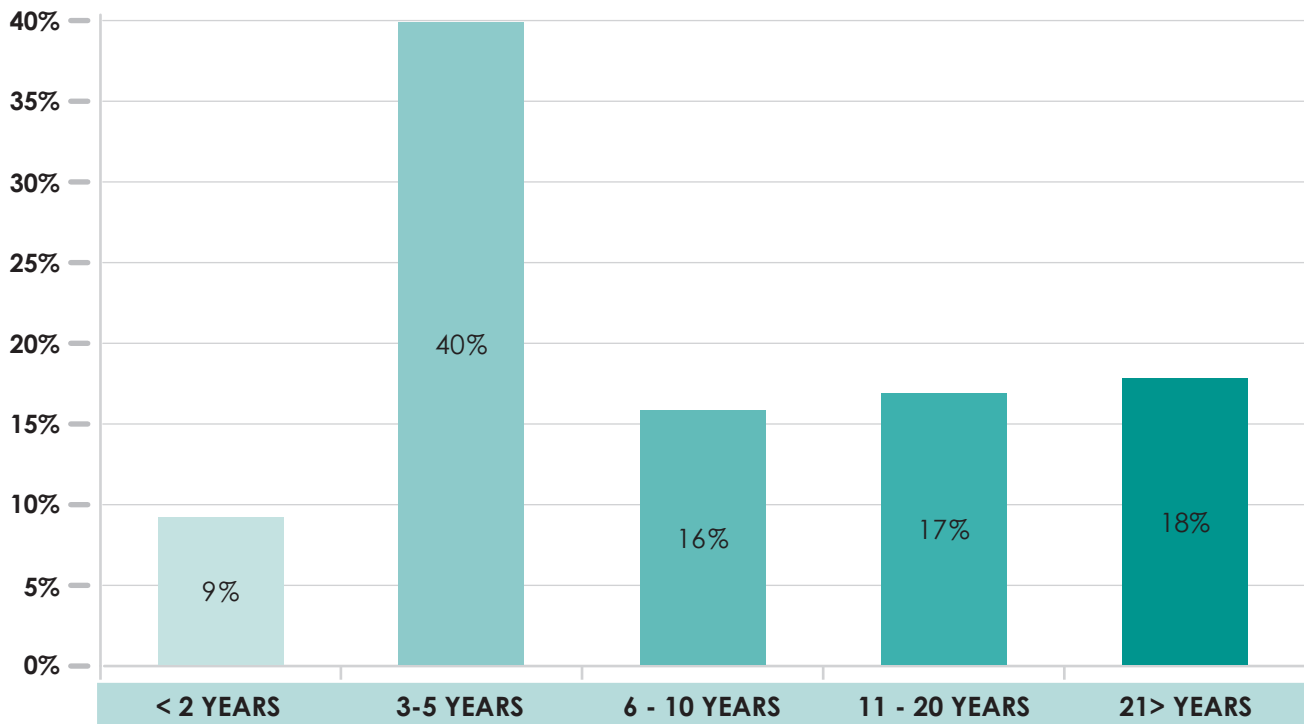
LECTURER QUALIFICATIONS BY THE ENGINEERING FIELD THEY TEACH, 2011



SOURCE : JET EDUCATION SERVICES, UNPUBLISHED DATA.

FIGURE 2

PERCENTAGE OF LECTURERS ACCORDING TO YEARS OF TEACHING EXPERIENCE, 2011



SOURCE : JET EDUCATION SERVICES, 2011.

qualification and a teaching qualification. Around 45% of lecturers have only a technical qualification (ranging between 36% and 51% depending on the engineering field). This is a cause for concern, as even though these lecturers have the theoretical knowledge from their technical qualifications, they may not have the pedagogical skills to adequately transfer it to their learners. Furthermore, many of those with technical qualifications have not upgraded for the 'newer subjects' required by the NCV (JET Education Services, 2011).

Turnover is high among lecturers as colleges compete with the private sector in attracting qualified staff, particularly in the engineering field where remuneration will always be higher in the private sector. Moreover, the recent conversion of teaching staff from civil service status to employees of the College Councils has led to unintended staff attrition in certain fields and across particular institutions (World Bank, 2011: 64). The survey of engineering lecturers found that on average lecturers' teaching experience at their current campus was six years (JET Education Services, 2011). The overall teaching experience on average was 11 years, with minimum being 8 months and maximum being 45 years. Figure 2 provides a breakdown in categories of overall teaching experience. It highlights that 49% of lecturers have been teaching for five years or less, while only 18% of the lecturers have been teaching for more than 20 years. With more experienced lecturers leaving the FET college sector, the

sector as a whole will need to address the issue of recruiting and retaining quality staff members in order to improve the quality of learning and teaching in the colleges.

CURRENT PROVISION OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING

It is very difficult to get an accurate picture of the technical and vocational education and training sector. Data for this sector has historically been collected separately by the Department of Basic Education, each of the SETAs and the South African Qualifications Authority (Taylor, 2011: 43). These data serve different purposes, and there is an absence of a common set of categories making it difficult to get a proper overview of provision in this sector as a whole. In recognition of this problem the DHET plans to develop a strategic management information system that could provide 'credible information and analysis in regards to both the supply (availability and supply pipeline) and demand for skills' (DHET, 2011b: 8).

Enrolment

In 2011 there were 50 FET colleges in South Africa with 264 campuses. FET college headcount enrolment by

TABLE 2

PUBLIC FET COLLEGE STUDENT ENROLMENT BY PROGRAMME, 2001 TO 2010

PROGRAMME	N1-N6 GS	N1-N6 NS	N1-N6 TOTAL	NCV	TOTAL
2001	170 590	265 590	436 180	-	436 180
2002	166 105	281 502	447 607	-	447 607
2003	161 807	291 676	453 483	-	453 483
2004	162 605	297 770	460 375	-	460 375
2005	174 678	305 254	479 932	-	479 932
2006	193 717	330 135	523 852	-	523 852
2007	206 631	292 137	498 768	26 451	525 219
2008	194 249	262 408	456 657	67 512	524 169
2009	182 414	213 900	396 314	122 921	520 235
2010	164 137	195 912	360 049	156 235	516 284

SOURCE : 2001 TO 2009 DATA FROM DHET (2010: 1); 2010 DATA SUPPLIED BY THE DEPARTMENT OF HIGHER EDUCATION AND TRAINING.

NOTE. GS = general subjects; NS = natural science.

programme, according to Department of Higher Education and Training data, is shown in table 2. In 2007, the first year of the NCV, 26 451 learners enrolled in the NCV at level 2. In 2008 there were 67 512 learners enrolled in the NCV at levels 2 and 3, while in 2009 there were a total of 122 921 learners enrolled in the NCV at levels 2, 3 and 4. Enrolment has remained more or less unchanged in 2010 and 2011 as funding for FET colleges, which is tied to the medium-term expenditure framework (see section on Funding above), has remained static.

Table 2 above indicates the relative decline of N1-N6, particularly in the engineering arena, which coincides with the phasing out of these programmes. As indicated, N1-N6 still represented the majority of students in the colleges. However, the key challenge with respect to 'N' programmes is that students are likely to enrol in individual subjects rather than a full programme, whereas the NCV is a full qualification. In addition, while NCV students enrol in January, enrolment in 'N' programmes occurs throughout the year on a semester or trimester basis, implying that an individual student could enrol more than once during the year. Therefore, the ratio of actual 'N' students to NCV students is in fact smaller.

As of the end of 2011, there were 164 700 actual 'N' students and 120 053 NCV students. In terms of post-school learning opportunities, the colleges provide the following:

- Around 66 000 of the NCV learners are first time entrants. These learners will most likely have a grade 12 certificate (but are probably not eligible for higher education access) or will have a grade 11. Very few of them are likely to have a grade 9 or 10 (Gewer, 2010).
- Around 84 000 places are provided for post-grade 12 entry into N4 programmes (across the semesters and

trimesters), which can provide a route into universities of technology or a national diploma. The N4-N6 were in the process of being phased out, and, while this phasing out has been stopped, the N4-N6 will most likely undergo a process of curriculum review in order to achieve more alignment with the Higher Education Qualification Framework and thereby strengthen their value.

- Following the re-opening of the N1-N3 for the purpose of supporting increased artisan development, the colleges responded by making 57 000 places available. The treasury provided an additional R250million in 2011/12 to support the delivery of N1-N3 which was no longer funded in 2010/11. The key challenge in this regard has been for colleges to ensure that there are workplaces available to absorb N1-N3 learners into artisan training, and to ensure that all learners meet the minimum requirements for many of the industries, including that the learner should have a grade 12 with mathematics, and that they should take the correct subject combinations. Colleges have not necessarily taken heed of these requirements which has restricted the supply of the right candidates for artisan training.

Outside of the NCV and 'N' programmes, the FET colleges provide theory training for learnerships as well as skills programmes. Both these programmes are funded primarily through the SETAs or are privately funded by students. Enrolments in these programmes represent a small percentage of students. In 2011, FET colleges had only 15 980 learners in learnerships and 15 137 learners in skills programmes (Unpublished DHET figures). Skills programmes and theory training for learnerships represents a potential area of growth within the post-school system if a framework is put in place for SETAs and the National Skills Fund (NSF) to utilise colleges as a key

TABLE 3

ESTIMATED AVERAGE FET (NCV) CERTIFICATION RATE, 2009

	LEVEL 2	LEVEL 3	LEVEL 4
Certification Rate	9.6%	12.4%	23.3%

SOURCE : INFORMATION SUPPLIED BY THE DHET EXAMINATIONS DIRECTORATE.

site of delivery for occupational programmes.

In terms of private providers of technical and vocational education and training, in 2006 there were 864 private providers and over 4 000 training sites with a total headcount enrolment of about 710 000 trainees (World Bank, 2011: 60). According to the World Bank (2011: 61) private training provision complements, rather than duplicates, public provision: the engineering trades, for example, make up 60% of enrolment in public FET colleges (both NCV and 'N' courses) but only 10% of enrolment in private training institutions. The World Bank report notes that private skills provision is constrained by students' ability to pay and a slow accreditation process.

Throughput and completion rates

Throughput in FET colleges is a critical area of concern, although it is difficult to track this accurately because students may carry failed subjects from one level of the NCV to the next. Available information indicates that FET colleges have experienced very low certification rates in the NCV. These refer to students who pass all seven subjects required for certification at each NCV level. Data

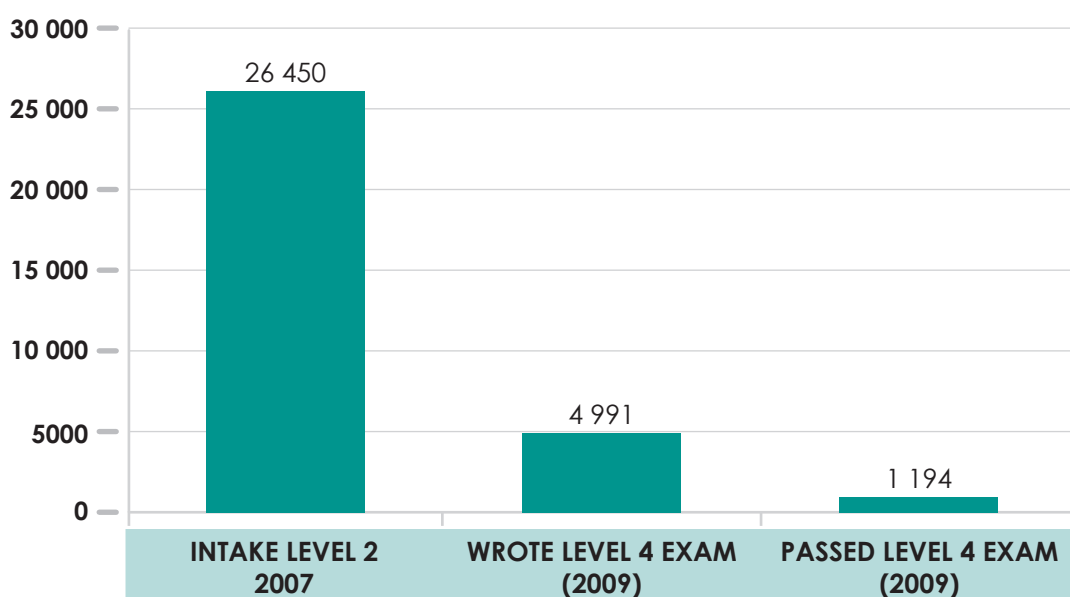
for 2009 show poor certification rates, particularly in level 2, but also in level 3 and level 4 (see table 3).

The poor certification rates at each level means that the completion rate is very low. Of the 26 500 students who enrolled in the first year (level 2) of NCV studies in 2007, less than 5% passed the level 4 examination at the end of 2009 (see figure 3). However, the World Bank (2011: 62) points out that this was the first cohort of students that enrolled for the NCV, and the college system was not adequately prepared at the time to offer the new curriculum. Both the World Bank (2011: 62) and Taylor (2011: 44) anticipated that the throughput will improve from 2010 onwards as the colleges adapted to the demands of the new curriculum. While the national examination results for 2010 have not been released publicly as of the time of writing, the indications are that the results will show substantial improvement.

Several other reasons have been suggested for the poor throughput and completion rates. Although the NCV was introduced as an alternative stream to secondary schooling, pre-grade 12 learners enter the colleges poorly prepared and struggle with the cognitive demand of the NCV. As Gewer and Elliot (2011) note, the FET colleges regularly report that weaker learners are pushed out of

FIGURE 3

FET THROUGHPUT – NCV (NUMBER OF STUDENTS)



SOURCE : WORLD BANK, 2011: 62.

school into the post-schooling system, passing on the responsibility for these learners to the FET colleges. While more than half (53% in 2010) the students in FET colleges have achieved a grade 12 certificate, and are thus more likely to have achieved the foundational language and mathematical ability needed and, therefore, to cope much better with the NCV curriculum, college lecturers struggle to adapt to these mixed groups. The inability to cater to this mix of learners (Gewer and Elliot 2011: 5) results in inadequate student support being provided. In addition, high lecturer turnover and inadequate qualification levels contribute to weak learner performance. Weak and varied learner preparation means that lecturers have to be all the more qualified to teach classes with mixed levels of preparedness and diversity of ages.

Throughput rates and completion rates for 'N' programmes and work-based programmes have also been consistently low. Data available for learnerships in 2007 suggest that the average completion rate was only 34% (World Bank, 2011: 62). Current completion rates for apprenticeships are in the range of 35% (Gewer and Elliot, 2011: 14). The student completion rate in many certificate and diploma programmes is low because of the difficulties which students have in finding places for internships or work

experience, which is integral to technician training (World Bank, 2011: 60).

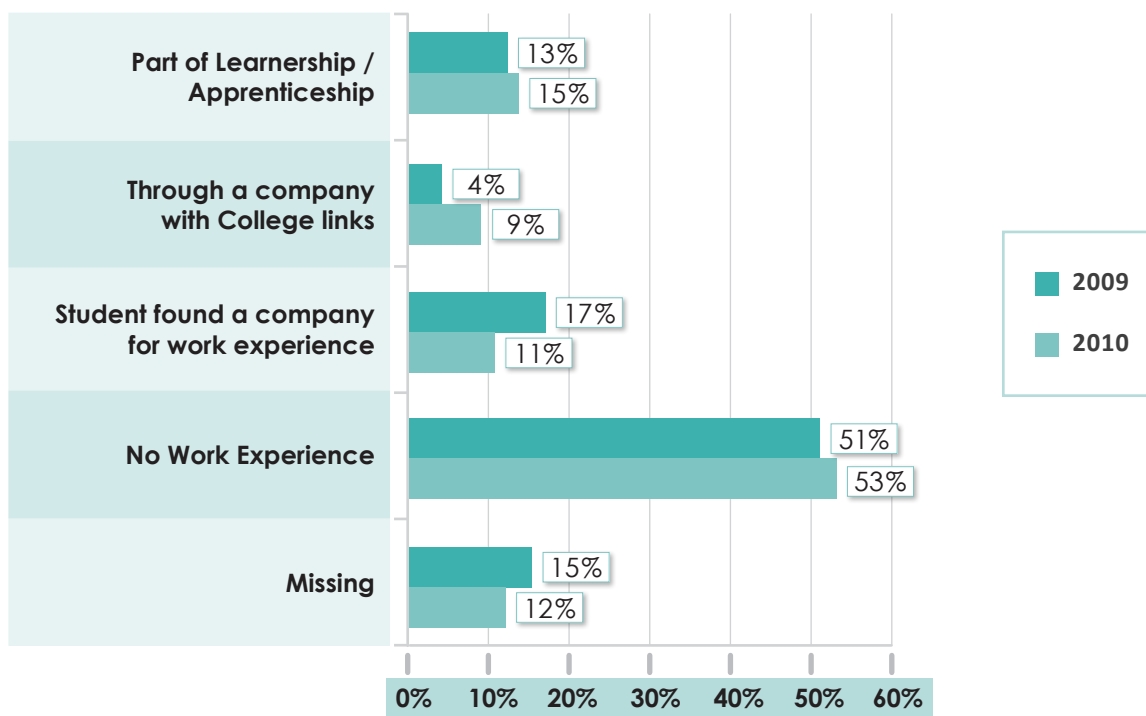
WORKPLACE EXPOSURE

Access to workplaces for on-the-job training is a key challenge for the delivery of technical and vocational education and training in South Africa (see figure 4). Most colleges have limited access to workplace learning options for students. Furthermore, most colleges do not have an industry linkage strategy to enable learners to gain workplace exposure, and where a strategy does exist, it is mainly informal or an initiative by an individual lecturer or college official (JET Education Services, 2011).

In a survey of engineering lecturers at FET colleges conducted in 2011, the most commonly cited reason for lack of linkages was industry's stringent health and safety regulations, as the learners would not be insured for accidents in the workplace (JET Education Services, 2011). The lack of workplace learning options is also an indication that industry 'does not appear to be convinced about the value of the current general vocational programmes and are unsure about what an NCV graduate would be

FIGURE 4

TYPE OF WORK EXPERIENCE OBTAINED BY FET COLLEGE STUDENTS DURING STUDIES, 2009 AND 2010



SOURCE : JET EDUCATION SERVICES, UNPUBLISHED DATA.

able to do in the workplace' (World Bank, 2011: 65). The phasing in of the NCV curriculum in the period 2007 to 2010 was characterised by uncertainty among colleges, and, consequently, among industry, who perceived the FET college sector as unstable (JET Education Services, 2011). As a result it has been difficult for colleges to pursue linkages for learners on NCV programmes. Although this negative perception is reported to be changing as industry

begins to understand the college sector (JET Education Services, 2011), this has not translated into more partnerships with colleges. A survey of over 18 000 college learners (Gewer, 2010) at the end of 2010 found that only 35% were gaining access to workplaces at the time, either through apprenticeships, learnerships or other forms of workplace learning.

REFERENCES

DEPARTMENT OF EDUCATION (2008)

National plan for further education and training colleges in South Africa. Government Gazette, No. 31712, 12 December 2008.

DEPARTMENT OF HIGHER EDUCATION AND TRAINING (2010)

Further education and training: National Certificate (Vocational) and Report 191 – Report on the conduct of national examinations. Pretoria.

DEPARTMENT OF HIGHER EDUCATION AND TRAINING (2011A)

Revised strategic plan 2010/11 – 2014/15 and operational plans for the 2011/12 financial year. Pretoria.

DEPARTMENT OF HIGHER EDUCATION AND TRAINING (2011B)

Delivery agreement 5: A skilled and capable workforce to support an inclusive growth path. <http://www.thepresidency.gov.za/MediaLib/Downloads/Home/Ministries/DepartmentofPerformanceMonitoringandEvaluation3/TheOutcomesApproach/Delivery%20Agreement%205%20Nov%202010.pdf> [Retrieved 4/10/2011]

DEPARTMENT OF HIGHER EDUCATION AND TRAINING (2011C)

National skills development strategy III. Pretoria.

DEPARTMENT OF HIGHER EDUCATION AND TRAINING (2011D)

Analysis and targets: national artisan development statistics. Presentation 15 June 2011.

FET ROUND TABLE (2010)

Document for discussion: Challenges facing the FET college subsystem - Towards finding resolutions in partnership with stakeholders. 9 April 2010. <http://www.jet.org.za/events/fet-college-round-table-and-summit/reports>. [Retrieved 1/11/2011]

GEWER, A (2010)

Choices and chances: FET colleges and the transition to the world of work. Johannesburg: National Business Initiative.

GEWER, A & ELLIOT, G (2011)

Size and shape: Post-school, pre-higher education, training & skills development landscape. Paper prepared for the National Planning Commission.

GRANT THORNTON (2009)

'Focus on: South Africa'. International Business Report 2009 – Country Focus Series. <http://www.internationalbusinessreport.com/files/gti%20ibr%20south%20africa%20focus%2009%20final.pdf> [Retrieved 3/10/2011]

JET EDUCATION SERVICES (2011)

FET college profiling report. June 2011. Unpublished mimeo.

NATIONAL BUSINESS INITIATIVE (2010)

Survey of information technology, construction and engineering lecturers in FET Colleges. Johannesburg: NBI.

NATIONAL STUDENT FINANCIAL AID SCHEME (2010)

Annual report for 2010. Pretoria: NSFAS.

NATIONAL STUDENT FINANCIAL AID SCHEME (2011)

Presentation to the portfolio committee on higher education & training: NSFAS strategic plan and budget 2011/12. 30 March 2011. <http://www.pmg.org.za/report/20110330-department-higher-education-training-its-operational-plans-201112> [Retrieved 27/10/2011].

NZIMANDE, B (2011)

Budget vote speech by Minister of Higher Education and Training Dr Blade Nzimande. National Assembly, 26 May 2011.

REPUBLIC OF SOUTH AFRICA (2009)

FET Colleges Act, 2006: National norms and standards for funding further education and training colleges (NSF-FET). Pretoria: Government Printers.

TAYLOR, N (2011)

Priorities for addressing South Africa's Education and Training crisis: A review commissioned by the National Planning Commission. JET Education Services, 10 June.

WORLD BANK (2011)

Closing the skills and technology gaps in South Africa. Second Draft. May 19, 2011. Washington, DC: World Bank.

LIST OF TABLES & FIGURES

AN OVERVIEW OF SELECTED SCHOOLING INDICATORS, 2001-2010

	PAGE
TABLE 1: Attendance at ECD sites, 2000 & 2009	2
TABLE 2: Grade R enrolment as % of grade 1 enrolment, 2001-2010	2
TABLE 3: Ordinary public and independent schools with and without grade R, 2009	3
TABLE 4: Number of grade 1 learners in ordinary schools who have attended a pre-primary programme, by province and gender, 2009	3
TABLE 5: Learners by grade in ordinary public schools, 2001 & 2010	4
TABLE 6: Out of School Population, 2002-2009	5
TABLE 7: Percentage of 16-18 year olds attending education institutions, by race and by gender, 2002-2009	5
TABLE 8: Gross enrolment rate by level and province, 2001 & 2009 (%)	6
TABLE 9: Under-and over-age enrolment, 1995 & 2009	7
TABLE 10: Net flow-through rates in selected grades	7
TABLE 11: Percentage of repeaters in each grade in 2001 & 2009	7
TABLE 12: Dropout rate by grade, 2007/2008	8
TABLE 13: Average percentage scores by province after re-marking, 2011	8
TABLE 14a: Grade 3 literacy and numeracy performance by level of achievement, 2011	9
TABLE 14b: Grade 6 language and maths performance by level of achievement, 2011	9
TABLE 15: Number of candidates and pass rates in the senior certificate examinations by province, 2001 & 2010	10
TABLE 16: Number and % of ordinary schools lacking certain facilities, 2007	11
TABLE 17: Learner/classroom ratios, 2000 & 2009	12
TABLE 18: Number of learners and teachers at public and independent schools, 2001-2010	13

	PAGE
TABLE 19: Number of schools with learner/educator ratios over 35:1 by province, 2010	13

STRENGTHENING EARLY LITERACY AND NUMERACY TEACHING AND LEARNING

TABLE 1: Average percentage scores attained in the grade 3 and grade 6 systemic evaluations	17
Figure 1: Performance levels in grade 3 literacy in the systemic evaluation achievement test by province, 2001, 2007.	17
Figure 2: Performance levels in grade 3 numeracy in the systemic evaluation achievement test by province, 2001, 2007	18
TABLE 2: Grade 3 standardised test results in the Western Cape, 2009 & 2010	20
TABLE 3: Grade 6 Mathematics and Language test results, Western Cape, 2009 & 2010	20
TABLE 4: WCED provincial test scores: Mean proportion of learners achieving 50%	21
TABLE 5: % learners in WCED schools obtaining at least a 50% score according to curriculum specifications, by grade 1, 2, 4 & 5, 2009	21

SOUTH AFRICA'S FURTHER EDUCATION AND TRAINING COLLEGE SECTOR AT A GLANCE

TABLE 1: Technical and Vocational Education and Training Programmes available	25
Figure 1: Lecturer qualifications by the engineering field they teach, 2011	28
Figure 2: percentage of lecturers according to years of teaching experience, 2011	29
TABLE 2: Public FET college student enrolment by programme, 2001 to 2010	30
TABLE 3: Estimated average FET (NCV) certification rate, 2009	31
Figure 3: FET Throughput – NCV (number of students)	31
Figure 4: Type of work experience obtained by FET College students during studies, 2009 & 2010	32