


Labour Markets and Social Policy

Meeting Equity Targets:
Are There Enough Graduates?

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employment growth & development initiative

innovative employment strategies

MEETING EQUITY TARGETS: ARE THERE ENOUGH GRADUATES?

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1. Background

For the purpose of reaching equity targets, a number of sectors have expressed concern that the higher education sector may not be offering sufficient supply of black graduates. This brief offers some baseline data to identify the possible pool learners and graduates from previously disadvantaged groups – from which industry might source its future employees. The information is sourced from HEMIS data and does not reflect learners or graduates in private or foreign institutions[1].

We offer a cross-section of information about enrolments and graduates. Although much has been made about the need for commerce graduates from universities, it is well known that many bright young people have difficulty accessing opportunities in education and do not necessarily make strong choices when the opportunity presents itself. The problems are: weak information, poor access to financial resources, and weak math and sciences education in historically disadvantaged, predominantly black schools (Moleke 2004, HSRC – forthcoming). The reforms required in the education sector and labour market will take some time to correct; however, there is strong evidence to show that it is possible to rapidly address these problems with bridging courses and internships.

[1] The HSRC is currently involved in an exercise to project education output into the future based on past experience and expected policy impact – this should be available in the first quarter of 2004.

2. Enrolments in universities and technikons

Tables 1(a) and 1(b) show the number of students in higher education and training institutions (HET) in four different major fields of study. These tables disaggregate these students by race. We have also differentiated between universities and technikons. The largest proportion of students enrol in humanities and social sciences. But one can see a clear bias amongst African students – about 70% enrol in humanities & social sciences and in education.

Technikons are clearly an important access point to tertiary education for African, accounting for about 73% of technikon students. More importantly, there is a much more even distribution of African and Coloured students across the disciplines, with much more emphasis on commerce and engineering.

Table 1(a) & 1(b) – Enrolments in HET institutions, by race

Universities: Field of study	Enrolments				
	African	Coloured	Indian	White	Total
Science, Engineering and Technology	33,395	4,002	9,673	38,489	85,559
Humanities & Social Sciences	73,697	8,234	10,127	51,783	143,841
Business, Commerce & Management	29,680	4,648	10,895	36,167	81,390
Education	76,575	3,055	1,294	5,793	86,717
Total	**213,348**	**19,940**	**31,988**	**132,232**	**397,508**

Technikons: Field of study	Enrolments				
	African	Coloured	Asian	White	Total
Science, Engineering and Technology	45,633	4,590	4,626	15,969	70,818
Humanities & Social Sciences	42,097	3,661	1,730	8,471	55,959
Business, Commerce & Management	48,090	4,071	1,797	9,107	63,065
Education	12,935	171	40	194	13,340
Total	**148,755**	**12,493**	**8,193**	**33,741**	**203,182**

[Source: Subotsky 2003]

Figure 1 and 2 below represent this information in graphical format. Figure 2 gives a clear indication of how important technikon education is to African labour market entrants. The overwhelming majority of technikon students – about 150,000 or approximately three-quarters of the total – are African. This may be a marker of barriers for African matriculants. This means that business could keep an open mind in respect of area of study and source of graduate – as ability to access positions in 'Higher Advantaged Universities' (HAU) may not be a sufficient sorter of personal capability in respect of African matriculants.

Figure 1 – Enrolments in universities, by race

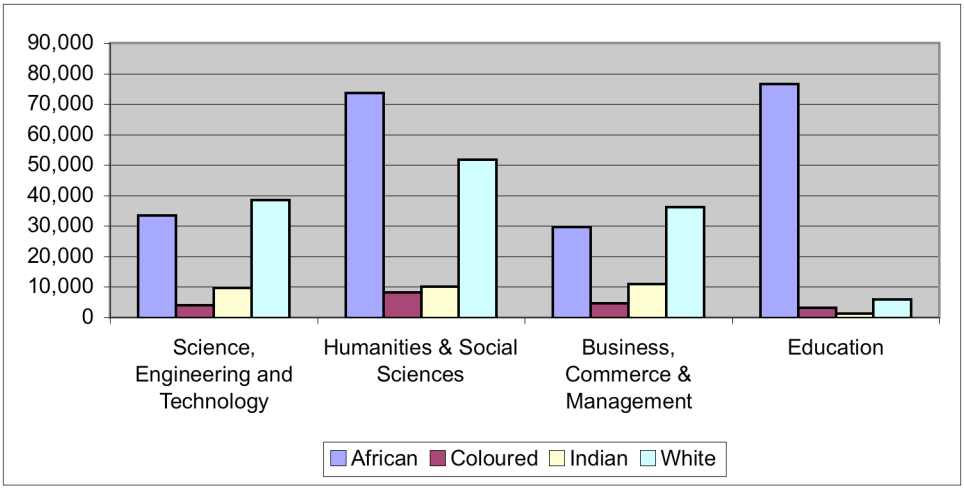
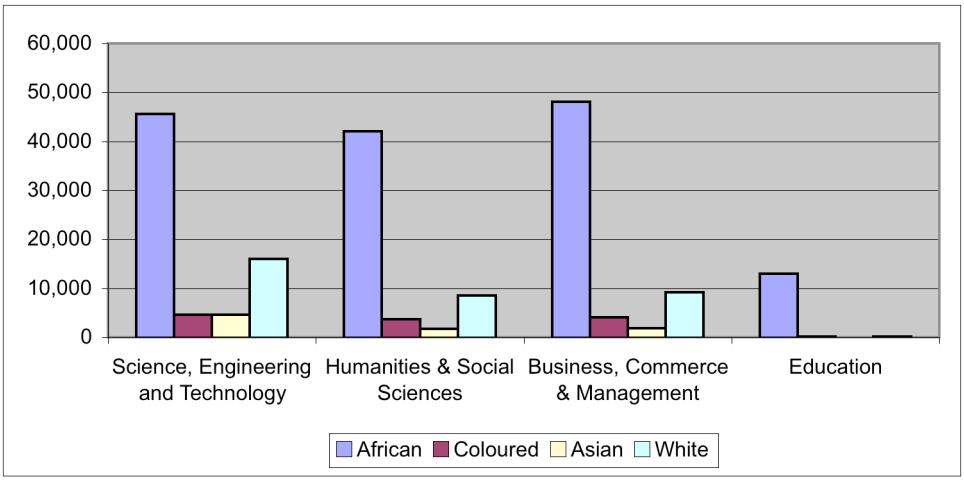


Figure 2 – Enrolments in technikons, by race

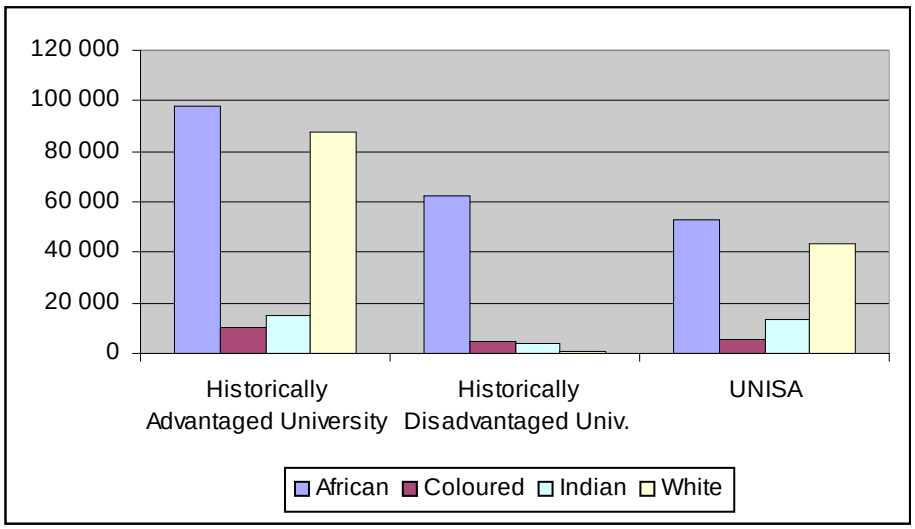


We also show whether the institutions are historically advantaged or disadvantaged. This is once again disaggregated by race. UNISA and TECH SA are recorded separately. Figures 3 and 4 summarise this information.

African students and White students have the highest enrolments in advantaged as well as disadvantaged universities. The same can be said for Technikons. There are approximately 200,000 African students enrolled in universities across the country. Add to this figure a further enrolment of 50,000 Indian and Coloured students. The perception that there are not many African graduates may arise as a result of the distribution across institutions – disadvantage for graduates, and poor information for

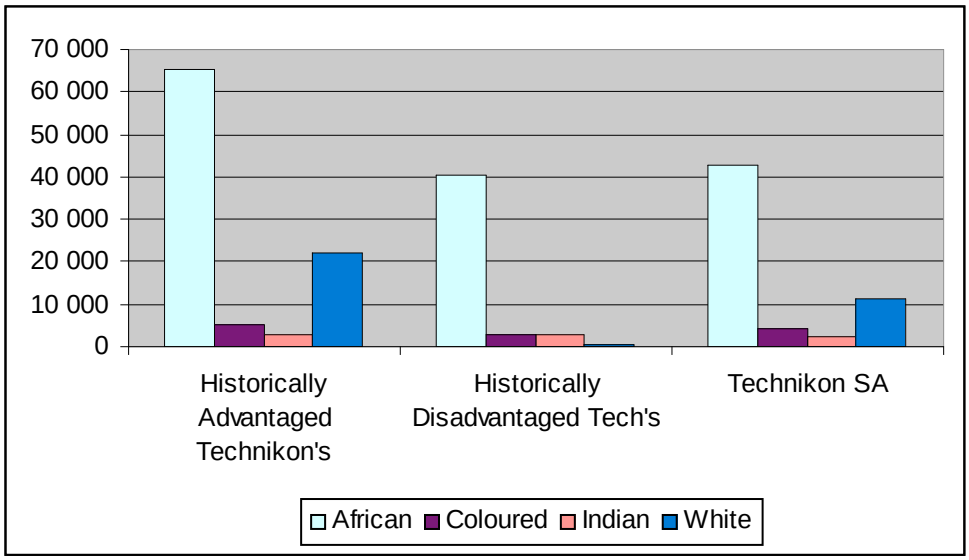
employers – is entrenched in this system – where a very large portion of African students attend 'Historically Disadvantaged Universities (HDUs) and distance learning institutions. The HDU graduates tend to fare much more poorly in the labour market than their HAU counterparts (see forthcoming HSRC study). Distance learning is a useful way of accessing education – but does not offer the kind of interaction, personal growth experience and networks gained in contact education.

Figure 3 – Enrolments in advantaged and disadvantaged universities, by race



[Source: Subotsky 2003]

Figure 4 – Enrolments in advantaged and disadvantaged technikons, by race



[Source: Subotsky 2003]

3. Graduates from universities and technikons

Table 2 shows the number and percentage of students who graduated in each of these different fields in the year 2001. This represents the immediate supply of people either looking for work or moving on to graduate study.

Table 2 – Graduates by field of study (2001)

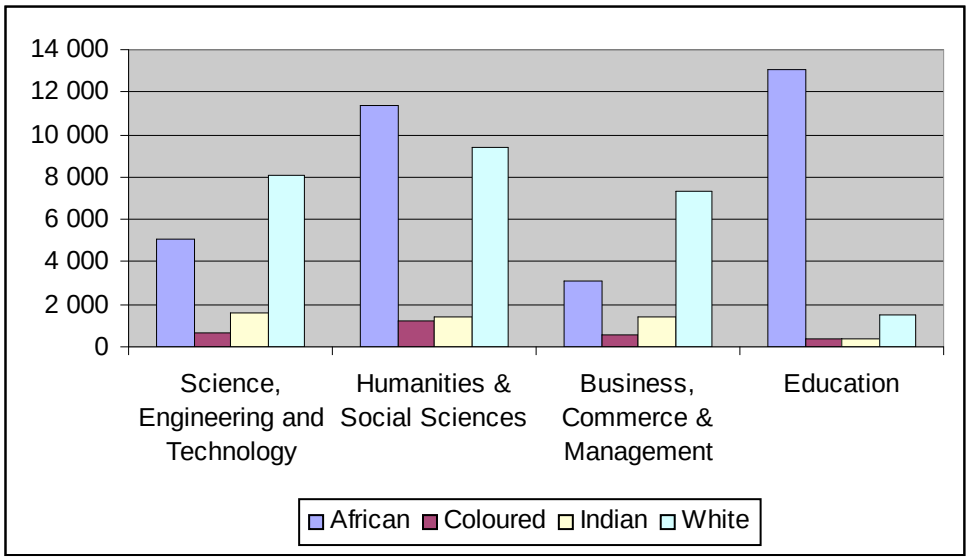
Major field of study	Universities		Technikons		Total	
	Number	%	Number	%	Number	%
Sciences & Engineering	16,135	22	7,774	34	23,909	25
Business & Management	13,225	18	6,651	38	21,876	23
Education	21,080	29	2,067	9	23,147	24
Humanities & Social Sciences	21,901	30	4,476	19	26,377	28
Total	72,341	100	22,988	100	95,329	100

[Source: Dept of Education (2003)]

Having a look at figure 5 and 6 below, we can see the number of graduates by race. This clearly shows that within universities, African students are achieving high success rates in education studies and social and humanities sciences. White students still seem to maintain the highest graduation levels when it comes to science and business studies.

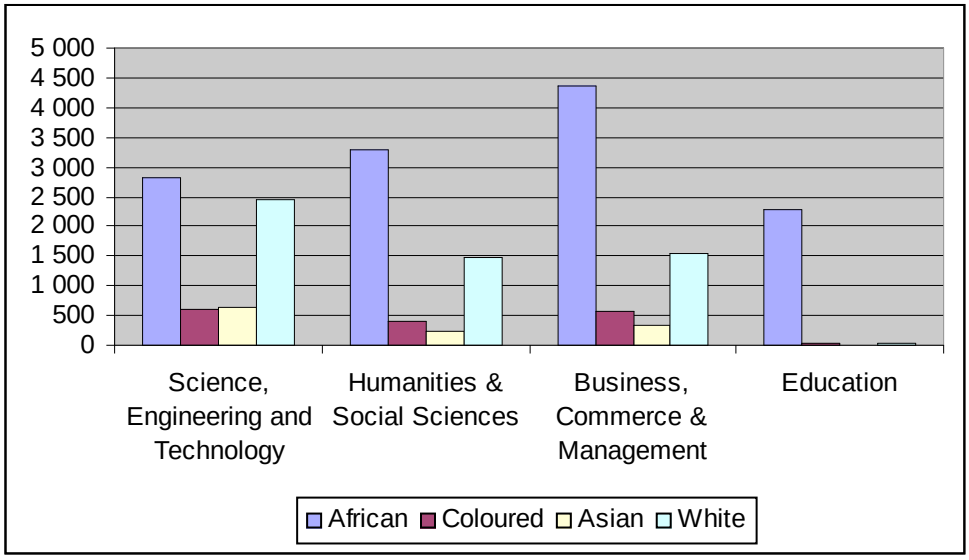
If we consider figure 6, however, we find that within technikons, the graduation rate is highest for African students for all fields of study, most noticeably so for business and commerce studies. The question, however, still remains whether these individuals will find work or represent an over-supply.

Figure 5 – Graduation for universities, by race



[Source: Subotsky 2003]

Figure 6 – Graduation for technikons, by race



[Source: Subotsky 2003]

Not only is it important to consider the number of students enrolled and graduating at HET institutions, but one must also look at the pass rates to determine where problems might lie, especially relating to racial factors and fields of study. Table 3(a)

and 3(b) below show this information, once again keeping universities and technikons separate. African students at universities overall show a pass rate which is lower than average. The same can be said for Coloured and Asian students. Unfortunately business studies show the lowest pass rates for universities.

Table 3(a) & 3(b) – Graduation rates, by field of study and race (%)

Universities: Field of study	Pass rates				
	African	Coloured	Indian	White	Average
Science, Engineering and Technology	15	17	16	21	18
Humanities & Social Sciences	15	15	13	18	16
Business, Commerce & Management	10	13	13	20	15
Education	17	11	28	25	17
Total	**15**	**14**	**15**	**20**	**17**

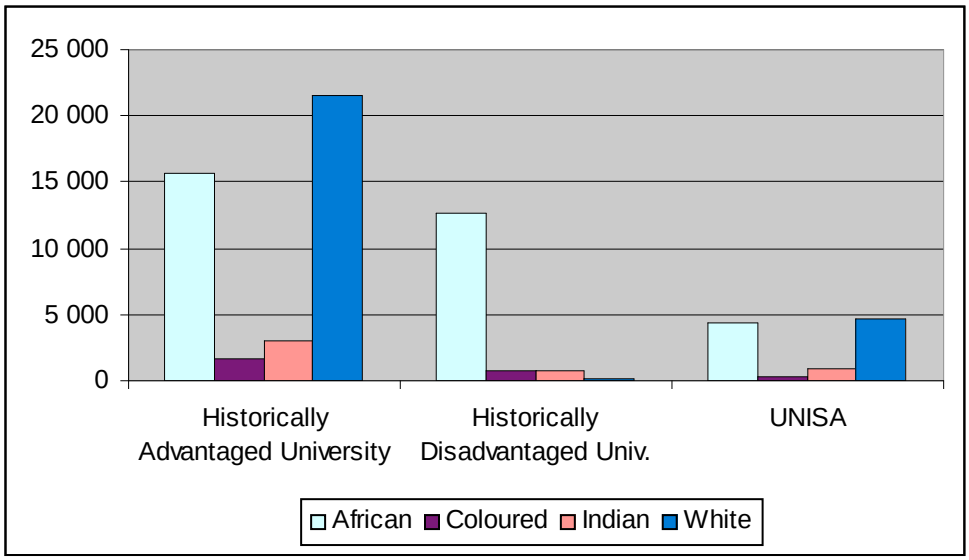
Technikons: Field of Study	Pass Rates				
	African	Coloured	Asian	White	Average
Science, Engineering and Technology	6	13	14	15	9
Humanities & Social Sciences	8	11	14	17	10
Business, Commerce & Management	9	14	18	17	11
Education	18	20	20	23	18
Total	**9**	**13**	**15**	**16**	**10**

[Source: Subotsky 2003]

Technikons also show an incredibly low pass rate for African students, and once again, commerce and business studies are at the lower end of the scale with respect to successful graduates.

Graduates from historically advantaged and disadvantaged higher education & training (HET) institutions should also be considered in this analysis. This is done in figures 7 and 8. While there are a large number of African graduates, from historically advantaged universities, we can see that they are still outnumbered by their white counterparts. Unlike other race groups, the majority of African graduates still come from historically disadvantaged universities and from technikons. It is also worth noting that a very large proportion of African enrolments are at distance education institutions which have very high drop-out rates, possibly explaining why the graduation rates are so low.

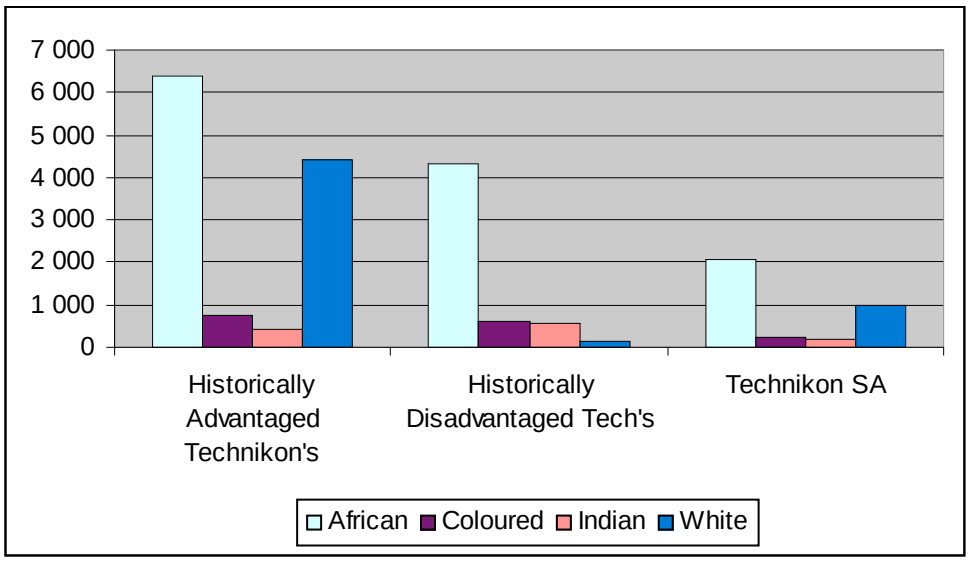
Figure 7 – Graduates from universities



[Source: Subotsky 2003]

If we consider technikon graduates in figure 8 below, one can see that African students show a particularly large number of graduates, be they from historically advantaged or disadvantaged tertiary backgrounds. In this case, the African graduates outnumber the White graduates in the historically advantaged context.

Figure 8 – Graduates from technikons



[Source: Subotsky 2003]

Table 4(a) & 4(b) – Graduation rates (%)

University	Graduation Rates				
	African	**Coloured**	**Indian**	**White**	**Total**
Historically Advantaged University	16	17	20	24	20
Historically Disadvantaged Universities	20	18	19	18	20
UNISA	8	7	7	11	9
Total	15	14	15	18	16

Technikons	African	Coloured	Indian	White	Total
Historically Advantaged Technikons	10	14	15	20	13
Historically Disadvantaged Technikons	11	20	19	28	14
Technikon SA	5	6	9	9	7
Total	9	13	14	19	11

[Source: Subotsky 2003]

The pass rates for HAUs, HDUs, HATs and HDTs are reflected in tables 4(a) and 4(b) above. White students show the highest pass rates with respect to universities and technikons, whether they are historically advantaged or disadvantaged ones. African and Coloured students show the lowest pass rates on average for both types of institutions as mentioned above.

4. Further education and training (FET)

FET is also worth noting, as it is a first stop for a large number of Africans after secondary school. About 270,000 African learners are enrolled in FET institutions – making up about three-quarters of total FET enrolments. Figure 9 shows that a very large proportion of these people are enrolled in Gauteng – certainly disproportionate to the distribution of the population.

Figure 9 – Enrolments in FET by race and province

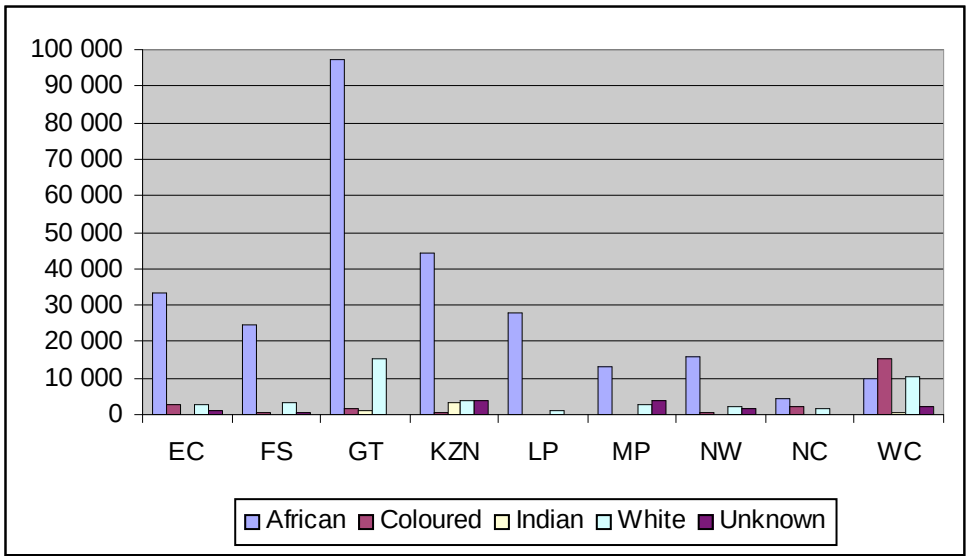


Table 5 – Graduates from FET sector, by field of study and province

Major field of study	EC	FS	GT	KZN	LP	MP	NW	NC	WC	Total
Arts & Music	1,309	460	1,700	114	28	0	0	18	540	4,169
Business Studies	21,273	13,290	36,465	13,620	7,170	9,221	6,542	2,555	17,031	127,167
Educare & Social Services	102	212	499	160	28	293	34	78	1,779	3,185
Engineering	14,977	11,666	65,704	29,279	21,477	8,779	13,283	3,567	15,574	184,306
Education	922	2,571	3,410	8,806	103	1,269	0	1,277	256	18,614
Utility Studies	1,916	970	7,599	3,281	276	967	177	736	2,688	18,610
Total	40,499	29,169	115,377	55,269	29,082	20,529	20,036	8,231	37,867	356,059

[Source: Dept of Education (2003)]

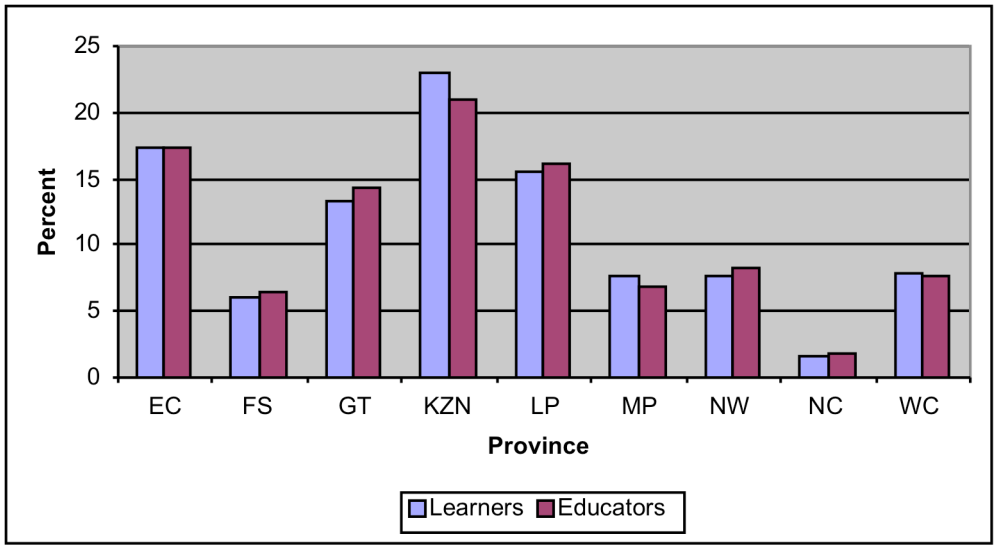
Table 5 shows the number of learners enrolled in the public FET sector for the year 2001. There are now six major vocational fields of study specified. One can see that nationally, engineering has the highest number of enrolments, followed by business studies.

5. Basic education

Finally, it is worth noting what numbers of learners are enrolled in schools, and are passing matric – this is the most basic source of graduates.

Figure one below gives an indication of the percentage of learners that are enrolled in schools across the provinces. These learners represent those children in the schooling system between grades 0 and 12.

Figure 10 – Distribution of learners by province (2001)



[Source: Dept of Education, 2003]

How many of these learners pass matric? How many are able to move on to higher learning? Table 6 shows the number of learners that passed matric with and without an exemption. Those without exemptions can move into fields that require less qualification (via FET institutions), or they may try and obtain an exemption through another secondary institution.

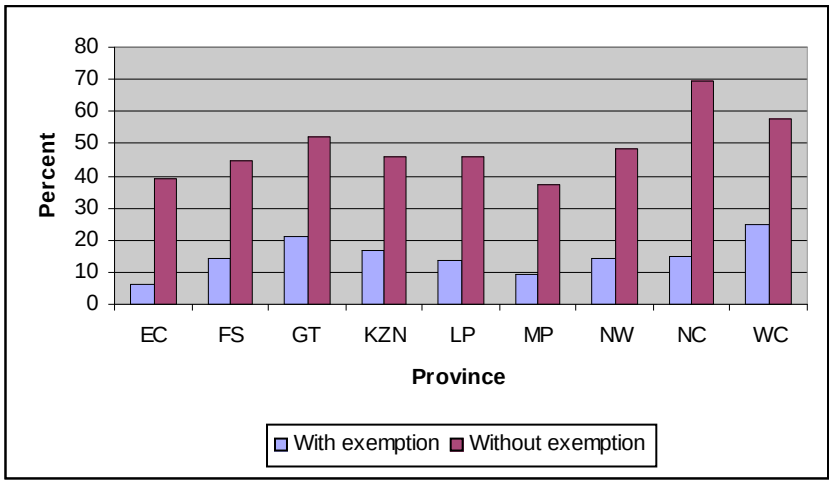
Table 6 – Matric passes, by province

	EC	FS	GT	KZN	LP	MP	NW	NC	WC	Total
With exemption	4,133	3,853	13,697	15,697	10,994	3,701	5,279	975	9,378	67,707
Without exemption	24,692	11,850	33,671	42,923	37,977	14,435	17,684	4,596	21,671	209,499
Total	28,825	15,703	47,368	58,620	48,971	18,136	22,963	5,571	31,049	277,206

[Source: Dept of Education (2003)]

Figure 11 expresses this same information in percentage form. There are very few learners that are passing matric with a matric exemption – the highest percentage of those achieving exemptions are located in the Western Cape and Gauteng.

Figure 11 – Matric pass rates by province (%)



[Source: Dept of Education (2003)]

6. Summary

This information certainly points to sufficient numbers of enrolments in further and higher education. It is particularly worth remembering that the inability of a matric graduate to access an historically advantaged university is not necessarily a reflection of personal capability, particularly given SA's legacy of exclusion – which certainly still extends through the education system and labour market. In this context, and while government is attempting to address systemic exclusion, business can play an active role – by forming links with high schools in math & science education, and by offering bursaries into scarce skills, internships, and bridging courses – these measures would surely enable the financial sector to fill its equity targets.

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