SOUTH AFRICA: ACCESS BEFORE QUALITY, AND WHAT TO DO NOW? [1]

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Abstract

This paper will argue that, even if this tradeoff between mass access and average quality exists as a potential, or as a tendency, the evidence seems to indicate that most countries actually deal with the tradeoff reasonably successfully. The reconciliation of access (or equity) and quality is a matter of purposive policy, and is something that has been achieved when countries take policy courses where debate and experimentation result in improvements in both access and quality. But some countries (in fact, one particular set of countries) are an interesting and important exception—they show an important imbalance between access and quality. This imbalance illustrates the fact that the tension is between access and quality is real, and can only be overcome with conscious and hard-fought policy changes and implementation efforts. The region in question is Southern Africa. Within that region, South Africa seems paradigmatic. The paper will explore the typically Southern African (and South African specifically) imbalance between access and quality, will suggest that this imbalance may be a cautionary tale for other countries embarking on the massification of secondary education, and will explain what South Africa is doing at present to consciously attempt to redress the imbalance between access and quality.

Key Words: South Africa, massification, access and quality, secondary education.

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1. INTRODUCTION

Even in the poorest regions of the world, and in spite of the international agencies' recent focus on primary education as an international goal, access to secondary education is increasing much faster than access to primary education (World Bank 2005, p. 127). Along with a rapid increase in enrollments comes a concern over the quality of the education received by those who attend. Either because education systems are now reaching out to social groups with less family tradition of schooling, or because resources are stretched too thin, concerns are voiced over whether the increase in access (or "equity") will reduce the average cognitive achievement of those who do enroll. While this concern is

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voiced more commonly around the EFA goals regarding primary education (see World Bank 2006, and also the Internet summary of this book[2], or, for example, Duraisamy, James, Lane, and Tan 1997), the apparent logic would apply to secondary education. All this takes place in an intellectual context where issues of equity and equality have become paramount (see Carnoy 2005 and Bolívar 2005).

This paper will argue that, even if this tradeoff between mass access and average quality exists as a potential, or as a tendency, the evidence seems to indicate that most countries actually deal with the tradeoff reasonably successfully—as noted by the World Bank its report on secondary education (World Bank 2005, p. 60) in a chapter authored by one of the authors of the present paper. UNESCO (2005, p. 107) notes that this tradeoff may not be as severe as normally thought if the political economy "works out," as it were. But our point here is stronger—our point is that it often has worked out, historically, in most countries—though we will give evidence that one should not count on it. Using data similar to that in the aforementioned World Bank report, we will show that if one looks across countries at any given point in time, those with highest access tend also to be those with highest achievement. Yet, this does not mean that the tension does not exist; it simply means that countries tend to implicitly or explicitly recognize the tension, and deal with it, by improving teacher professionalism, by setting up programs that compensate for the poor background of students from lower socio-economic strata, and through other measures. In other words, the reconciliation of access (or equity) and quality is a matter of purposive policy, and is something that has been achieved when countries take policy courses where debate and experimentation result in improvements in both access and quality. But some countries (in fact, one particular set of countries) are an interesting and important exception—they show an important imbalance between access and quality. This imbalance illustrates the fact that the tension is between access and quality is real, and can only be overcome with conscious and hard-fought policy changes and implementation efforts. The region in question is Southern Africa. Within that region, South Africa seems paradigmatic. The paper will explore the typically Southern African (and South African specifically) imbalance between access and quality, will suggest that this imbalance may be a cautionary tale for other countries embarking on the massification of secondary education, and will explain what South Africa is doing at present to consciously attempt to redress the imbalance between access and quality.

South Africa also makes an interesting case because it has gone through two successive waves of massification of secondary education. The white segments of the society went through massification of secondary education roughly at the same time as most Western countries: largely in the middle

[2] Accessed at http://www.worldbank.org/ieg/education/findings.html on 21 August 2006.

third of the 20th century.[3] It will be shown that this massification was accompanied by tensions between quality and access. The paper will show that a second massification of access took place, particularly for the African segments of the population, starting in the 1980s (or maybe slightly earlier). This massification, in terms of access, is now nearly complete. The new, democratic government that came in 1994, must now turn more consciously to an improvement in learning outcomes for the majority of the population.

2. RELATING ACCESS AND QUALITY: INTERNATIONAL EVIDENCE ON THE MAIN PATTERNS

Until recently policy analysts had comparable international evidence only about access, particularly for developing country. The existence of databases on learning outcomes that are reasonably comparable across countries, and that include developing countries, is a relatively new phenomenon, dating from the 1990s. Furthermore, the situation has improved greatly in the first few years of the 21st century. Since 1990, there have been about a dozen (TIMSS 1995, 1999 and 2003, PISA 2000 and 2003, IALS, PIRLS, PASEC, SACMEQ, MLA, LLECE, and perhaps others) attempts to gauge countries' comparative educational performance in terms of cognitive achievement. However, only two of those take place at a late-enough stage in countries' educational cycles that they could be said to pertain to secondary education: PISA, which takes place at age 15, and the Grade 8 TIMSS assessment. Interestingly, quite a few countries have participated in both TIMSS and PISA. Only 9 countries have participated in all versions of TIMSS *and* all versions of PISA. However, many more have participated in various pair-wise subsets of these various assessments. The following table shows the country-wise correlation between the average score in TIMSS mathematics and TIMSS science, as well as the average PISA scores on the reading, mathematics, and scientific literacy scales for each possible sub-set. The table also shows the number of countries overlapping in each pair of assessments. In total 72 countries have participated in at least one of these assessments, and 27 of them could be considered "developing countries" (though of course the number of developing countries counted depends on one's definition—the one used here is simply the authors' sense).

[3] The continued use of racial categories in social analysis of South Africa may appear to the international reader as odd. However, South African analysts and institutions still use racial categories as a way of tracking progress or continuing problems of racial inequality. For an interesting discussion of the issues, see an opinion piece by the Director General of Statistics South Africa, at http://www.statssa.gov.za/news_archive/05may2005_1.asp, accessed on 29 August 2006. The current South African convention is based on self-classification into five groups (black African, coloured, Indian or Asian, white, and other, see http://www.statssa.gov.za/census01/html/concepts%20&%20definitions.pdf accessed on 27 August 2006). "Black" is often used to refer to any non-white. We have adopted a fairly common convention of using "African" for "black African."

Table 1. *Country-wise inter-correlations between various secondary-level (or near-secondary) learning assessments*

	PISA 2000	PISA 2003	TIMSS 1995	TIMSS 1999	TIMSS 2003
PISA 2000	1 41				
PISA 2003	0.94 33	1 40			
TIMSS 1995	0.45 27	0.62 26	1 38		
TIMSS 1999	0.85 21	0.89 20	0.92 24	1 38	
TIMSS 2003	0.86 20	0.90 20	0.90 23	0.97 33	1 46

While PISA and TIMSS purport to measure quite different things (TIMSS does not assess reading ability, and is curriculum-based), the reality seems to be that cognitive development of youth is "all of a piece" and thus high-quality assessments applied at more or less the same time in the schooling cycle would tend to rank countries fairly similarly—more or less the same thing is being measured, ultimately.[4] Thus, the correlation between PISA and TIMSS scores across countries is really quite good (and linear), with the exception of TIMSS 1995. Using simple regression analysis, we created a "common" base using TIMSS 2003, because this assessment had the highest number of participating countries (46), and the highest number of participating developing countries (18, by our count and definition). This allowed us to create a synthetic "TIMSS 2003-equivalent" measure.

This measure can then be compared to measures of access at the secondary level, to see whether higher access, as measured by the net enrollment ratio,[5] generally goes along with higher learning achievement. This is done in Figure 1.[6] This figure demonstrates that in general countries with large-

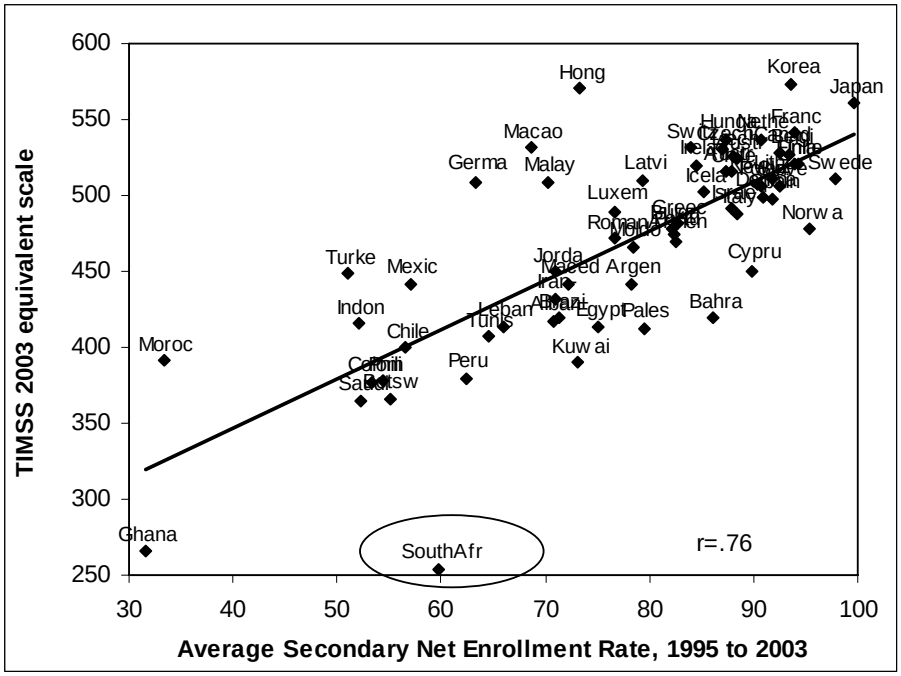
[4] Naturally, the purveyors of these assessments would probably tend to disagree. One supposes, and sympathizes with the fact, that everyone has to engage in product differentiation.

[5] We take the net, rather than the gross, enrollment ratio, because many European countries have an inordinately high reported gross enrollment ratio at the secondary level, which most likely reflects over-age enrollment due to lifelong-learning commitments and the classification of some of those options under the rubric of "secondary." In any case, as noted in the main text, the results are largely the same whether one uses the net or gross concepts.

[6] Note that the axes in this figure are truncated. This makes it possible to read the labels on the data points more easily, but it has the danger of exaggerating the differences between individual countries and the central trend. In any case, though, the "true" origin, particularly

scale access also tend to have higher learning achievement. The relationship is similar if we take the Gross Enrollment Rate as the measure of access. Again, no causality is implied; improved access does not lead to improved learning achievement at the secondary level. Nor is it implied that both improve on "automatic pilot." Instead, what most likely happens is that, even before information created by international assessments, societies have tended to be concerned about learning in the classroom. Most societies have tended to have internal debates about learning, as systems massified, and these debates typically resulted in policy changes that tended to resolve the tension between access and average achievement. It is possible that unusual pressure that drives access faster than the internal debates and policies on quality can absorb would lead to an imbalance between the two, in particular countries. All the graph shows is that under normal circumstances *most* societies have tended to attend to both imperatives reasonably well. Clearly, however, there are outliers in both directions. South Africa, our case in point, is an outlier in the direction of an imbalance in favor of access and against quality.

Figure 1. *Cross-sectional correlation between access and learning, secondary level*



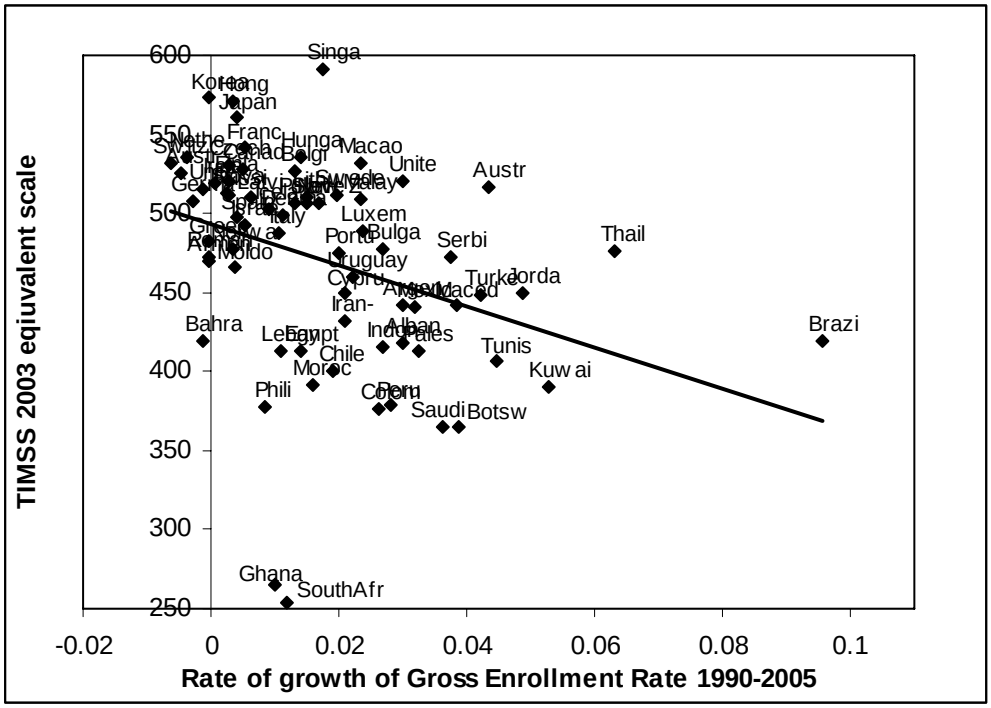
Source: calculated by the authors from the sources cited

It may be thought that it is not the terminal state that matters; it may be admitted that societies do indeed eventually reach a point of equilibrium and

on the vertical axis, is not a clear concept, as these assessments do not have a clearly defined zero point.

absorb the increases in access, and that therefore what causes undue strain is not high access per se, but the speed of approach towards a high-access or high-equity situation. This appears superficially to be the case. If one looks at the correlation between our TIMSS 2003-equivalent scale and the rate of growth in the gross enrollment ratio over the period in question (1990-2004),[7] one does get a significantly strong negative relationship, as Figure 2 shows. Again South Africa is shown to be an outlier: her low performance is not explainable in terms of an unduly fast expansion of secondary schooling.

Figure 2. *Relationship between growth of enrollment and learning results*



Source: calculated by the authors from the sources cited.

However, two factors need to be considered. First, the correlation in the latter figure is much lower: -0.34 as opposed to 0.76 in the former one. More importantly, one needs to ask whether this correlation is an artifact of the previous relationship. If countries with low enrollment at some point tend to be the ones that grow their enrollment the fastest (as it is logical to suppose), and if countries with low enrollment typically also have problems with quality, then the latter figure is really more or less a product of the former. If we take into account both factors simultaneously in trying to "predict" the TIMSS 2003-

[7] In this case the gross enrollment ratio is a better measure of access increase, because it measures the total growth of the system.

equivalent scale, then the growth factor fades into statistical and substantive insignificance. Enrollment itself is associated with an "effect size" of 0.71 on performance in the scale (and $p<0.001$), and growth in enrollment is associated only with a -0.11 effect size on performance (with $p>0.1$).[8] In this analysis South Africa is still the biggest outlier: South Africa does not have the excuse that it has expanded access too quickly.

Two questions arise at this point, one of which is a bit of digression but helps generalize the analysis, and the other one makes an important geographical point. First, does this analysis seem to hold if one considers all basic education (primary and secondary), not just secondary? And, second, are there other regional outliers similar to South Africa? We can extend the analysis performed above for many more countries if one does not insist on using only the highest-quality and near-secondary assessments such as TIMSS and PISA, and extends the analysis, creating a TIMSS-equivalent scale that uses other assessments (such as SACMEQ, PIRLS, etc.) that are typically applied at an earlier stage, in some cases, or that do not have quite the same institutional backing as the larger assessments, in other cases.

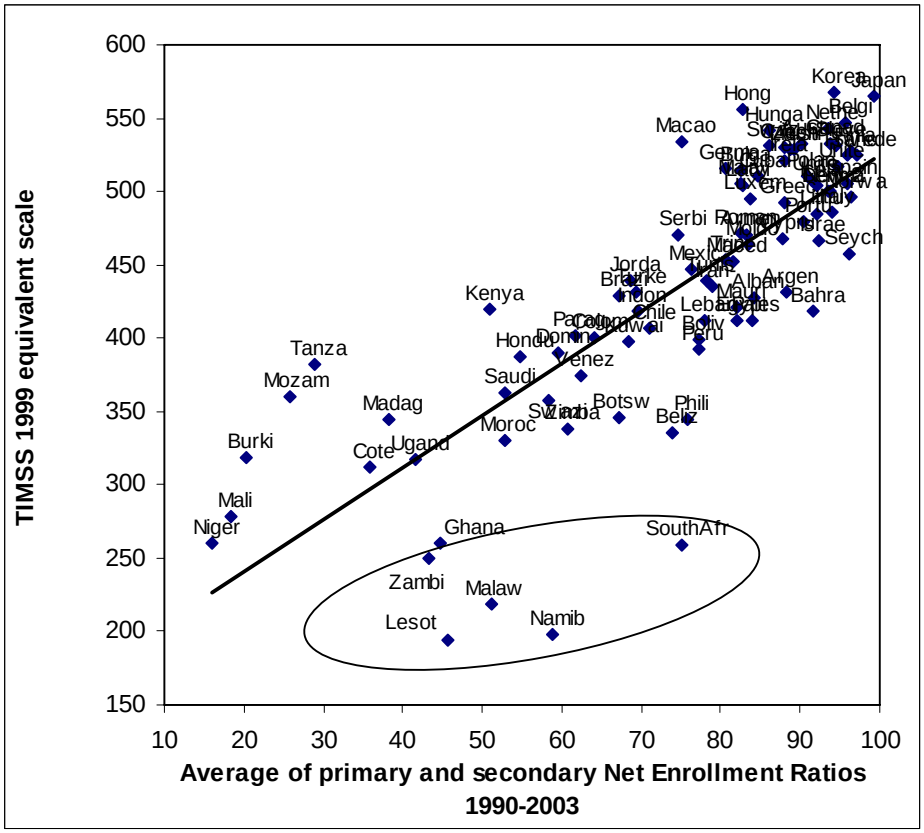
Taking into account all these other assessments, the results are those presented in **¡Error! La autoreferencia al marcador no es válida.**. This figure takes the average of the net enrollment ratios in primary and secondary, over the 1990s and early 2000s, as the index of access, and uses a TIMSS 1999 equivalent scale on the vertical axis that takes into account all of the international assessments done since 1990 and to which we had access.[9]

It seems as though the general association between access and learning achievement holds. In fact this relationship is, if anything, a little stronger if one takes all of pre-tertiary education together than if one considers only secondary education. South Africa is again confirmed as an outlier (in fact South Africa and Namibia are the biggest outliers—not likely a coincidence, given they are the two *apartheid* countries). However, this time, interestingly, we are able to note that there is a regional pattern. Countries in Southern Africa in general, whether they were part of the *apartheid* system or not, seem to have an unbalanced approach, where access does not go along very well with learning achievement. The fact that these countries have been mostly assessed through SACMEQ, and are all below the main trend, might generate this suspicion. We took considerable pains to ensure that this is not an artifact of an imperfect equating process across assessments, by carefully looking at other commonalities between countries, such as TIMSS, PASEC, MLA, and IEALS, and we feel that the data do reasonably well reflect, at least *a grosso modo* (enough to denote general tendencies), how much learning is going on in these countries. Furthermore, note that Kenya, Mozambique, and Tanzania are evaluated only through SACMEQ and yet they are above the line.

[8] That is, one standard deviation in the net enrollment ratio is associated with 0.71 standard deviations in performance in the TIMSS 2003-equivalent scale.

[9] For a description of how this scale was constructed contact lcrouch@rti.org.

Figure 3. *Correlation between learning outcomes and enrollment ratios, primary and secondary together*



Source: calculated by the authors from the sources cited.

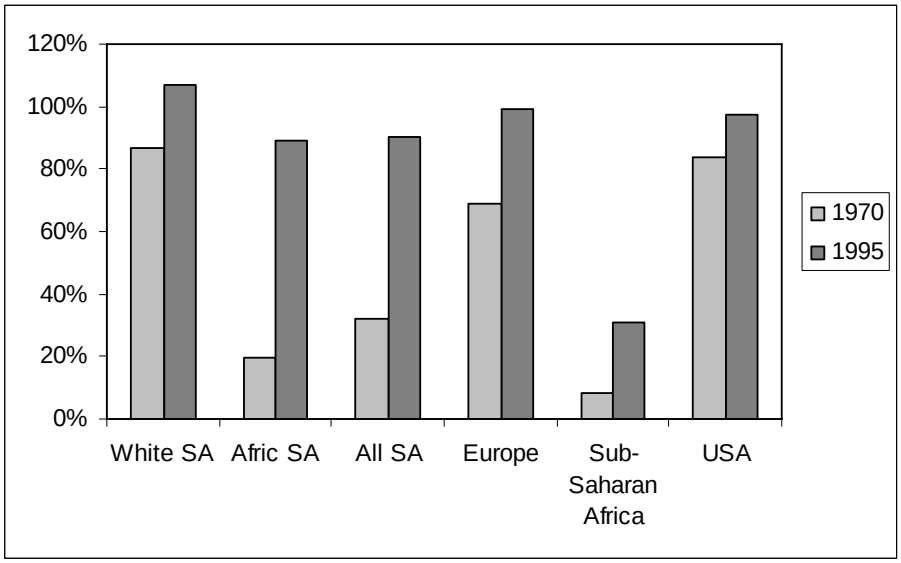
Finally, it seems interesting that there are fewer outliers above the line, and certainly no regions that are outliers as a whole. In that sense one could conclude that some countries err in overemphasizing access at the expense of learning, but none overemphasize learning at the expense of access; in some sense populism seems more common, and more of a danger, empirically, than elitism—though Tanzania and Mozambique seem close to being on the elitist side of the tradeoff.

3. THE MASSIFICATION OF SECONDARY EDUCATION IN SOUTH AFRICA

The pattern of development of mass access to secondary education has followed a two-world pattern. For whites, the development of mass access followed a pattern faster than Europe's. Europe as a whole lagged the US and the USSR in developing mass access to secondary education. South Africa's access profile, for whites, was at about the same level as the US, by 1970, and

the US was one of the earliest and fastest developers of mass secondary education. (A useful point of comparison is made in Goldin 2001. For a useful and short historical analysis of the main trends in the expansion of secondary education worldwide see World Bank (2005), especially Chapter 1.) For the African population the same applies. While populations of the developing parts of the world have expanded secondary education to levels much, much higher than was typical of developed countries at similar stages of development, this is also true, but even more so, for the African population with in South Africa. As shown in Figure 4, secondary education changed from being highly restricted to a mass access system for the African population of South Africa within 25 years at most, and was, already by 1995, almost 200% higher than for the rest of Sub-Saharan Africa—but as noted below, the quality of that education seriously lagged much of that provided in much poorer countries in Africa.

Figure 4. *Comparisons of expansion of access to secondary education: secondary gross enrollment ratios*



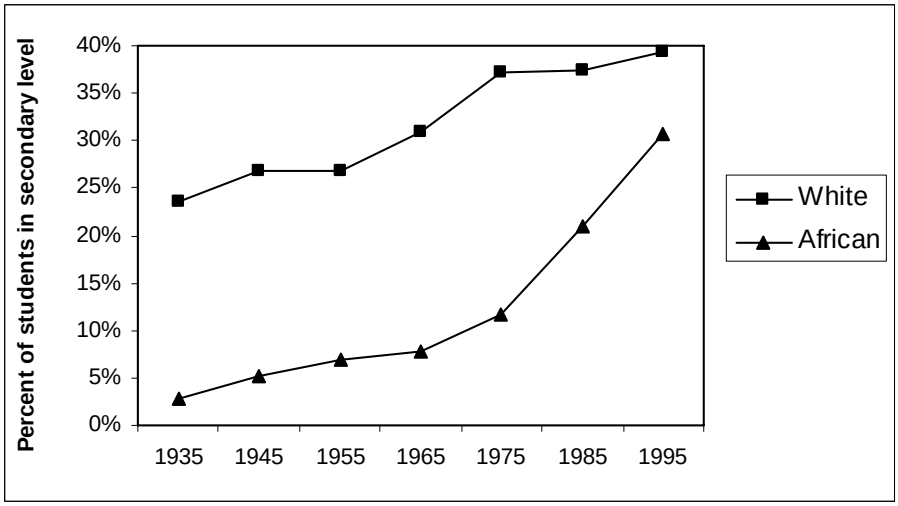
Sources: For 1970 SA, Malherbe (1977), backed out from data in p. 720. For 1995 SA, based on enrolment data form the SANEX database and population data of appropriate age back-cast from extrapolations of the 1996 and 2001 population censuses. For 1970 and 1995 for other regions, UNESCO online database.[10]

This long-range historical process in South Africa shows that, naturally, whites acceded to mass secondary education fairly early, but that the African segment of the population caught up very fast. This is well-documented in Louw, van der Berg, and Yu (2006). Unfortunately there are no gross enrollment ratios for a very long historical time series. One proxy for this is the proportion of total

[10] As available at http://www.uis.unesco.org/en/stats/centre.htm, accessed on 27 August 2006.

pre-tertiary enrollment that is at secondary level, defined in this case as grades 8-12 in a 12-grade system. In a 12-grade system the theoretical maximum for the proportion enrolled in the 8-12 segment is 40%, or somewhat lower (given that there are deaths, and that population was of school-going age growing for most of this period, so the earlier grades will tend to have higher enrollment). Perhaps 30% would be an acceptable benchmark for "massification." Naturally this proxy works well if primary education itself is of mass access, which by 1990 it was for the whole population of South Africa. These data are shown in Figure 5. It shows that the white population had reached "massification" by the early 1960s, and the African population about 30 years later. It also shows that, as noted above, the white population in South Africa had reached near massive access as early as about 1935. The most interesting part of this graphic is, perhaps, to note that the gap between the white and African population was about 20 percentage points, and actually grew until 1975 or so (to 25 percentage points) and then dropped by 20 percentage points in just 20 years, to the point where by 1995 the gap was only about 8 points. This increase is really quite unprecedented by international standards. Using the UNESCO database, we calculate that no country in the world expanded its secondary education access faster than SA's African population, in the period 1970 to 1995. (The average across all countries for which we could find data both for 1970 and 1995 was and expansion of 27 percentage points in the gross enrollment ratio at the secondary level.) Thus, South Africa's was truly a massive expansion.[11]

Figure 5. *Long-range trends in secondary school access, South Africa*



Sources: From 1935 to 1973, Malherbe (1977, p. 714); 1975 is extrapolated linearly from Malherbe's 1963 to 1973 data; 1995 is estimated by the authors from enrollment data from the SANEX (South Africa's EMIS system at the time) data of 1995 and the population

[11] UNESCO database for historical data is found at http://www.uis.unesco.org/en/stats/statistics/indicators/indic0.htm. Accessed on 25 August 2006.

censuses of 1996 and 2001. 1985 is interpolated from quadratic fits of the data from 1935 to 1995 (R^2 was 0.94 and 0.98 for whites and Africans respectively).

Quality, though is another matter. We have already seen above, in section 0, how South Africa's learning achievement numbers fall below those of much poorer countries in Africa, based on international comparisons. But within South Africa, for good or for ill, the all-important barometer of quality is the so-called "matric (matriculation) pass rate," or the pass rate on the Senior Certificate Examination, which is a school-leaving certificate provided to those who pass a set of exams at the end of the 12th grade. What is interesting about this barometer is that for the entire process of massification of secondary education, at first of the white population, and now of the African population, there has been a constant outcry that standards are being lowered. The more recent debates tend to blame the new, democratic government, for lowering standards needed to pass (see Reddy 2006 for a summary of some of these debates). Thus, for example, students' class scores are counted towards the pass rate; students taking the exams in a language other than their home language are automatically awarded a few more points, and so on. It is also known that schools, under pressure to improve marks, have held students back, creating backlogs of repeaters in the pre-grade 12 grades. What is not so well known is how old these tactics are, and how exactly similar tactics and pressures were involved in, and resulted from, the massification of access for the white population during the middle third of the 20th century. For example, in a period of large scale increase in mass access in the white system, the proportions of students taking mathematics, as opposed to new subjects designed to cater to a mass system, changed as is shown in Table 2. The "matric" exam system also serves as a filter into universities (the "exemption" aspect), and even this aspect was watered down. Similarly, in 1971 a change was introduced whereby a student could obtain an "exemption" without having passed mathematics (Malherbe 1977, p. 448). Similarly, the tactic of using school-based marks to combine with those of the external examination in deciding whether a student "passed" was instituted as far back as 1922 (Malherbe 1977, p. 245). Malherbe humorously notes that while many a student's poor marks in the external exam were helped by the school-based marks, there were never cases of a student's good external marks being brought down to a failure by poor school-based marks (p. 246). This sort of tactic led to an increase of as much as 20% in the pass rate. To be sure, there was the occasional push-back, and at various times attempts were made to re-instate tougher standards, but on the whole the trend seems to have been towards a significant decline of standards for the white system during its period of mass expansion.

tions of students taking subjects for matriculation and senior certificate examinations

	1924	1930	1946
Mathematics	100%	87%	65%
Commercial subjects	1%	1%	52%

Source: Malherbe (1977, p. 249).

Fedderke, de Kadt, and Luiz (2000), in an invaluable contribution, document that during the entire 20th Century, the proportion of white students taking mathematics as an examinable subject declined *steadily* from 100% in the early 20th Century, to about 40% by the 1990s, and that this was largely accountable for a steady, but rather artificial, increase in the pass rates for whites during the entire 20th Century. (They show that if one controls for the tendency to reduce the proportion of maths-taking, the pass rate for whites was constant during the 20th Century.) At the same time, the pass rate for Africans was constant (since independent measurements started being taken, in the mid 1950s), but the proportion of Africans taking mathematics actually went up during the 2nd half of the 20th Century (but down in the late 1980s).

Thus, South Africa's tendency to emphasize mass access in a very forgiving manner when it comes to quality is not at all new, and is not attributable to the new, democratic government; it is indeed a venerable and well-established tradition. Massification has been associated with shifts in what is expected from students, first with the whites, during the entire 20th Century, and now (and actually probably to a lesser degree, given the pressures of globalization) with the entire (and African-majority, by definition) population. This most likely accounts, at least in great part, for the fact that South Africa is such a significant outlier when access is plotted against learning results, as was extensively discussed in section 0.

4. INTERVENTIONS AIMED AT QUALITY IMPROVEMENT ON SECONDARY EDUCATION – SHARPENING THE FOCUS ON QUALITY

As has been shown, South Africa performs poorly on international comparisons of learning assessments at the secondary or near-secondary level. She has, however, very high levels of access to secondary education, in fact it is hard to believe they could be, or should be, any higher. At the same time (though this has not been discussed), access to the tertiary level (partly because secondary quality is poor) is probably too low to sustain a globalised economy. Internal assessments of learning achievement also raise constant worries. It has also been shown that a tendency to be rather forgiving about learning standards at the secondary level is not a new thing; it is a phenomenon with considerable historical inertia. It seems logical to ask, then, how these trends can be reverted, and what the new, democratic government has tried, and is trying, as a means of reversing the situation.

Before 1995 racially determined education departments existed and set different Senior Certificate Examinations. In 1996 the establishment of a national and nine provincial education departments (geographic rather than racial decentralization) led to provincially-set Senior Certificate Examinations. This changed profoundly the quality or cognitive demand of examinations sat by African learners in Grade 12 and saw a sharp decline in the numbers passing in 1996 from 279000 to 1999 of 249000 (see **¡Error! No se encuentra el origen de la referencia.**). Of greater significance is the decline in the number passing on the quality indicators of "exemption" passes and higher grade mathematics

and science[12]. Of greatest concern was that the number of pupils passing higher grade mathematics declined by 10000 from 29000 to 19000.

In the immediate post-apartheid period (1996 to 1999) various strategies were put in place to improve the quality of secondary education in South Africa. The first was the Culture of Learning, Teaching and Service (COLTS), which aimed to address the erosion of time and disruption of teaching and learning that had become part of school culture in the late 1980s and early 1990s, during the period of struggle against apartheid. This was a necessary start to the quality campaign given secondary schools' involvement in the liberation struggle, during which slogans such as "liberation before education" were common. However, the newly established provincial educations did not have the staff or the resources to make this campaign bite.

In 2001 the new Minister of Education started a new campaign to address high failure rates in schools. This campaign had two aspects: setting national targets for pass rates on the one hand and targeting time management and teaching and learning in poorly performing schools, that is, schools with under 20% pass rates.

There was also at this time (2001) a first stab at improving the access of Africans to the quality or gateway subjects of secondary education. This was the cabinet-approved Mathematics, Science and Technology Education Strategy, which aimed to increase participation and success rates in these key subjects. Central to this Strategy was the selection of 102 schools to drive the goals of the Strategy.

By 2003 there were signs that this more directed campaign was paying dividends and there was improved *efficiency* in secondary schooling. More learners were passing, pass rates were rising, and the number of schools with pass rates of lower than 20% were declining. However, there was also a steady decline in access to the examination, with fewer learners in grade 12 in 2003 than in 2000. The reaction from the provincial education departments to the national pressure to improve the pass rate was to discourage pupils from sitting for the exam, partly by holding them back.

There were also indications that the *quality* of the passes might be in decline or not expanding. The first signal was the reduction in the proportion passing on higher grade subjects and particularly maths and science (see **¡Error! No se encuentra el origen de la referencia.**). More strikingly there were concerns expressed by academics and teachers that the cognitive demand of the examinations were in decline. This concern reached a high level in 2003 with the spike in results on all indicators.

[12] The exemption relates to a particular type of pass that is recognized for university admission. All subjects are offered at two quite different levels: higher grade and standard grade.

Table 3. *Changes in Senior Certificate Examination performance*

Year	Total candidates writing	Total candidates passing	Percent pass rate	Total passing with exemption	Percent passing with exemption	Maths Higher Grade	Maths Standard Grade	Science Higher Grade	Science Standard Grade
1995	531453	283742	53%	78821	15%	10%	19%	12%	10%
1996	518225	279487	54%	80015	15%	8%	21%	9%	11%
1997	555267	264795	48%	69007	12%	7%	25%	10%	13%
1998	552862	272488	49%	69856	13%	7%	25%	10%	16%
1999	511474	249831	49%	63725	12%	8%	29%	10%	18%
2000	489941	283294	58%	68626	14%	7%	28%	8%	19%
2001	449371	277206	62%	67707	15%	7%	26%	9%	16%
2002	443821	305774	69%	75048	17%	7%	31%	8%	19%
2003	440267	322492	73%	82010	19%	7%	31%	8%	19%
2004	467985	330717	71%	85117	18%	7%	33%	8%	22%
2005	508363	347184	68%	86531	17%	8%	32%	9%	21%

Source: Department of Education, South Africa.

Umalusi, the quality assurance body of the secondary schools, put these concerns to the test in a research project that looked both at the numbers passing on higher and standard grade and the quality of key examination papers over ten years (see Umalusi 2004). This research report found that the demands of the selected examination papers had in fact declined. This led to instructions to examiners to improve the cognitive demand of the examinations in 2004 and subsequent years. As can be seen, the tradeoff between cognitive demand (or quality, or "standards") and access continued their interplay during the post-*apartheid* period, with debates and tensions that parallel those taking place within the largely white system during the middle of the 20th Century.

Since 2004 to there have been three new initiatives aimed at improving the quality of secondary education in South Africa. The first is the introduction of a new curriculum from 2006 that raises the cognitive demand of the subjects. The new curriculum will be introduced into Grades 10, 11 and 12 in 2006, 2007 and 2008 respectively. The 29 subjects, which make up the National Curriculum Statement, are updated and expanded versions of subjects currently offered in South African schools and will be offered at only one level. In the past subjects were offered at two grade levels: higher grade and standard grade. This meant that learners offered and were able to pass Grade 12 on differentiated curricula. The majority of African learners were enrolled on standard grade. In the new curriculum subjects will all be offered at the higher-grade level, which means

that many more pupils than in the past will be offering a more cognitively demanding curriculum.

The second initiative is the National Learner Attainment Strategy which requires all provinces to develop interventions to support increased pass rates in poorly performing schools where Africans are in the majority. These interventions include pace-setters, common examinations in grades 10, 11 and 12, additional classes and training for teachers.

The third is the expansion and greater focus of the Dinaledi Project, a project aimed at improving the performance of African students on mathematics and science[13]. The Dinaledi Schools were increased to 400 in 2006. Although some successes were recorded in Dinaledi Phase 1, there was no systematic process of selection of schools, support provided, target setting or monitoring and evaluation. In the second phase, rather than being chosen, schools now have to qualify through indicators of potential to produce African higher grade graduates. In addition, the Department of Education has set up a systematic package of support, incentives for teacher training, incentives for increased numbers passing mathematics and science at higher levels of achievement and has set all Dinaledi schools targets to double their output by 2008.

As South Africa increasingly recognizes that it has put access before cognitive development in the past, and that this tendency is pervasive in the system, it is turning to trying to redress this imbalance, particularly in favour of the African majority. Tensions are likely to continue, but the task has been engaged.

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BIOGRAPHICAL NOTES

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