

Low quality Education as a Poverty Trap in South Africa

Research Paper

LOW
QUALITY

EDUCATION

POVERTY TRAP

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This paper aims to inform policy-makers, researchers and development practitioners in South Africa in building the evidence-base and its use in policy-making to address poverty and inequality. It is supported by the Programme to Support Pro-Poor Policy Development (PSPPD), a partnership between the Presidency, Republic of South Africa and the European Union. For more information about the PSPPD go to www.pspgd Land Ronelle.org.za



Contents

Acronyms	iv
Executive summary	1
1. The Backdrop: Institutional reform, improved equity in education spending and expanded access to education in South Africa	2
1.1 Institutional reform	2
1.2 Improved equity in educational spending	2
1.3 Expanded access to education in South Africa.....	3
2. The greater challenge of improving quality throughout the school system	4
2.1 Educational studies conducted	4
2.2 The impact of socio-economic status on educational achievement.....	4
2.3 Enrolment of 5-year-old learners at an educational institution.....	6
2.4 The importance of school socio-economic status	6
2.5 The variability of management and classroom practices across schools	8
3. The impact of poor quality education on labour market outcomes	9
3.1 The human capital model.....	9
3.2 Poor assessment standards	9
3.3 What role does race play?	10
4. Policy implications.....	11
References	12

Acronyms

ANA	Annual National Assessments
CAPS	Curriculum and Assessment Policy Statements
C2005	Curriculum 2005
DET	Historically black schools
DoE	Department of Education
ECD	Early Childhood Development
HOA	Historically white schools
NIDS	National Income Dynamics Study
NSES	National School Effectiveness Study
PIRLS	Progress in International Reading Literacy Study
SACMEQ	Southern and East African Consortium for Monitoring Education Quality
TIMSS	Trends in International Mathematics and Science Study

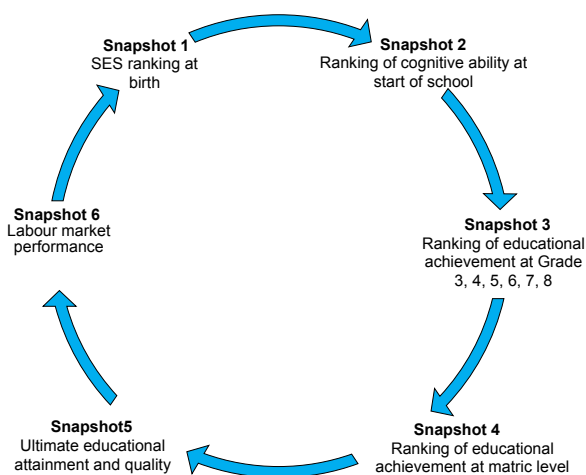
EXECUTIVE

SUMMARY

EXECUTIVE SUMMARY

At the time of transition to democracy, the South African education system was envisaged to foster nation-building, promote democratic values, and provide a pathway out of poverty for the poor. Fundamental reforms to the administration, governance and funding of education were immediately necessary. A unified national department of education was established and considerable responsibility was filtered down to the provincial level. Curriculum reform presented an opportunity to advance inclusive education. Public spending on education has evolved from being highly unequal on the basis of race, to being well-targeted towards poor children. Despite these mainly positive trends, a far more resilient legacy of the past is the low quality of education within the historically disadvantaged schools. This has proven to be a barrier to the pathway out of poverty for children from poor communities, and has not increased social mobility, nor reduced inequality in South African society. The schematic diagram illustrates this.

Figure 1: Schematic diagram showing the role of education in intergenerational mobility



Snapshot 1 shows that individuals are born into a particular position in the socio-economic spectrum. Snapshots 2 to 6 show points throughout the course of an individual's educational development and into the labour market.

The figure illustrates how a person's ranking at one point impacts on, and into the next generation. This applies to virtually all societies. The exact extent to which socio-economic status and prior achievement determine future prospects, however, varies across societies. One key factor affecting the degree of transformation versus reproduction in society is whether schools serving children from poor communities successfully offer them real opportunities to excel academically and to reach a level of educational achievement that will provide an effective pathway out of poverty. The central question underlying the research summarised in this paper is whether the quality of education in South Africa is so low that it serves to trap children from poor communities in an on-going cycle of poverty.

This paper is divided into two main parts. The first part focuses on the quality of education across the school system. Attention is drawn to the low level of cognitive achievement demonstrated by many South African children, and to how widely this varies on the basis of socio-economic status and between the historically different sections of the school system. Given how early these educational inequalities are manifested, this research paper suggests that policy interventions should be implemented early in primary school, in pre-school, and even during the Early Childhood Development (ECD) phase. Several large-scale sample surveys of educational achievement in South African schools are analysed, and a number of suggestions about specific school and teaching practices that appear to be linked to better learner achievement, even after the negative impact of poverty, have been made.

The second part of this research paper examines the impact of low quality teaching and learning on performance in the labour market. This research paper suggests that income inequality in South Africa is being driven by differences in the level, and more importantly the quality of education people attain. Policies that address income inequality by intervening directly in the labour market will have limited success as long as these inequalities in education persist.

BACKDROP

1 THE BACKDROP: INSTITUTIONAL REFORM, IMPROVED EQUITY IN EDUCATION SPENDING AND EXPANDED ACCESS TO EDUCATION IN SOUTH AFRICA

1.1 Institutional reform

Education in apartheid South Africa was designed to be separate and unequal on the basis of race. Separate education departments were set up to administer the provision of education for each race group and for each homeland. Funding per learner was highly unequal and the content of the curriculum was different for each race group. Since 1994 there has been considerable institutional, curriculum and fiscal reform in the education sector. The racially separate administrations were consolidated into a single department of education; and considerable power was given to provincial education departments, especially in the administration of spending.

Curriculum reform was intended to innovatively promote nation-building and inclusive education, but once implemented, proved seriously flawed and has been widely discredited. C2005 suffered from a lack of clarity in its design and in its specified content, placed a large burden of paperwork on teachers and was not accompanied by sufficient teacher training. It produced damaging consequences such as under use of textbooks and course materials by teachers. Policy-makers have now recognised this and the new Curriculum and Assessment Policy Statements (CAPS) are intended to reflect this.

1.2 Improved equity in educational spending

Reform in education spending has been more successful. Analyses of fiscal incidence have shown that policy is now explicitly pro-poor in design, and in practice, has become increasingly well-targeted to the poor. According to Van der Berg (2009), 49% of education spending in 2006 reached the poorest 40% of the population. The extent to which educational spending can be pro-poor is limited by the fact that personnel spending makes up approximately 80% of overall education spending and favours better qualified teachers who are more concentrated in affluent schools. The Norms and Standards, introduced in 2000 and amended in 2006, stipulate that schools receive different levels of

non-personnel spending that depends on the poverty quintile into which they are classified. Since 2006, the poorest two quintiles of schools have been classified as “no-fee schools”. These schools do not charge fees but, as compensation, receive a greater amount of non-personnel funding. This has now been extended to include the third quintile. In its implementation, non-personnel funding actually received by schools is not yet at the level that the policy stipulated it should be. Table 1 shows the amounts of per learner non-personnel spending for each quintile that have been set as targets according to Government Notice 869 of 2006, and the actual amounts spent in each quintile.

Table 1: Median non-personnel spending per learner by school poverty quintile (Rand)

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Actual	711	711	481	474	228	591
Target	775	711	581	388	129	517

Source: Department of Education (2009: 39) ²

- There is a strong pro-poor design with targeted spending in quintile 1 which is approximately six times that of quintile 5.
- The top row shows that actual funding received by schools is pro-poor in practice although not as strongly as policy had intended.
- Several factors may account for the discrepancy between intended and actual non-personnel spending. These include inefficiencies in financial transfers to schools, the delivery of departmentally purchased goods, and crowding out of non-personnel spending by personnel spending, that is, schools decide to use funds designated for non-personnel spending to supplement teacher salaries (DoE) 2009: 50.

Although government spending on education is pro-poor, schools in more affluent communities remain better resourced because of the practice of charging school fees.

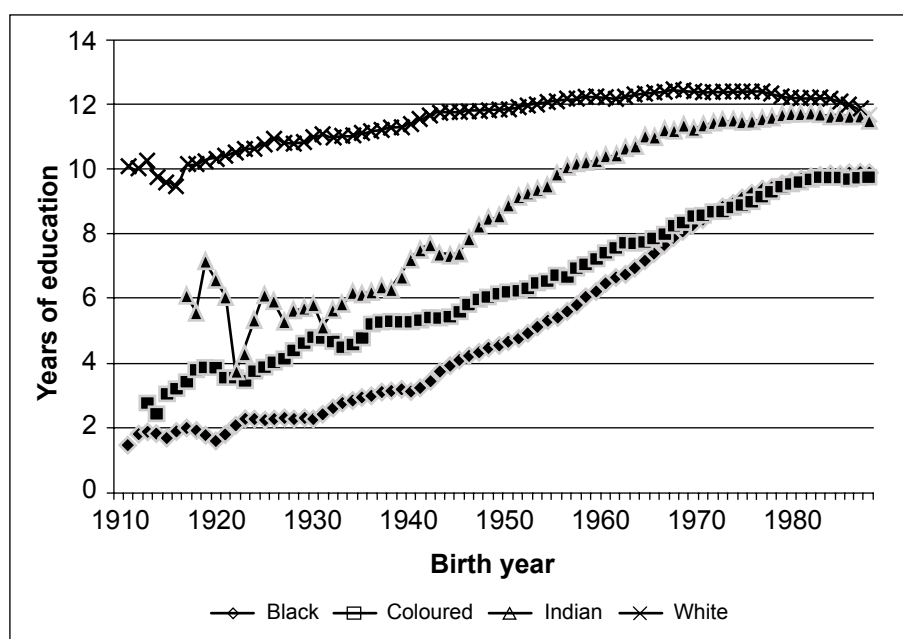
1.3 Expanded access to education in South Africa

Long term trends in educational attainment and access to education in South Africa also form part of the context for an analysis of present issues of quality. Figure 2 shows the mean years of education attained for each birth cohort of South Africans by race – attainment gaps between the different race groups have clearly diminished amongst the younger cohorts.

Figure 3 presents a cross-country comparison of attainment that reveals a peculiar pattern specific to South Africa. Attainment rates are comparably high until

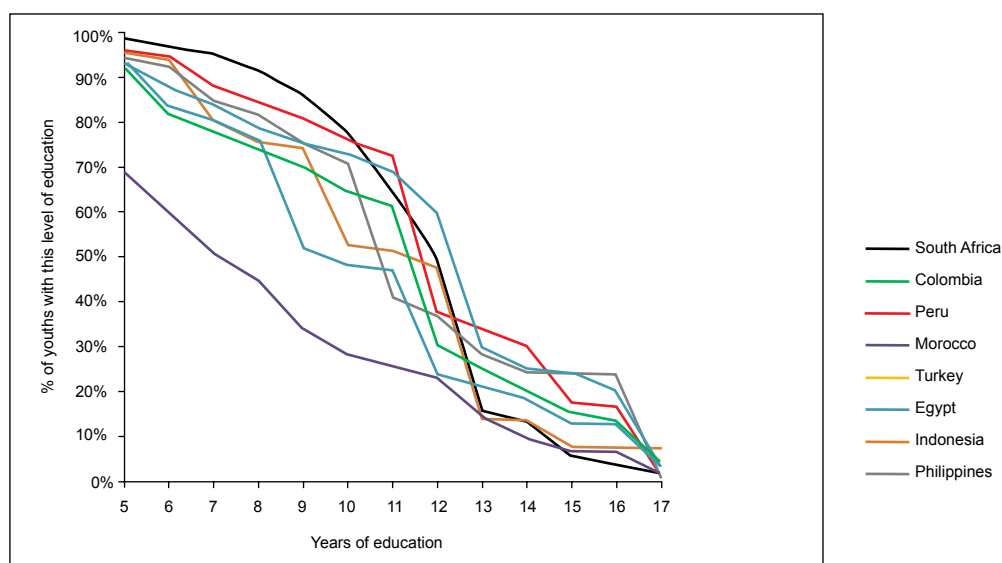
approximately 11 years of education. A sharp drop-off then ensues and results in comparably low rates of tertiary attainment. Considering this pattern from the point of view of access to education, one might be led to believe that South Africa is doing well throughout most of the primary and secondary phases of education, but poorly thereafter. However, it is necessary to understand that a key hurdle in the twelfth year of education is the matric examination, which prompts substantial drop-out prior to, and failure in the examination. High rates of grade progression, despite a generally low quality of schooling in the primary and early secondary phases, means that the attainment pattern in Figure 3 conceals where some of the most pertinent educational problems that South Africa is experiencing, lie.

Figure 2: Educational attainment by race group (three year moving averages)



Source: Own calculations based on Community Survey (2007)

Figure 3: Cross-country comparison of educational attainment



Sources: Quarterly Labour Force Survey 2009 (third quarter) for South Africa; Demographic Household Surveys for other countries (all from collections later than 2000)

THE GREATER CHALLENGE OF IMPROVING QUALITY THROUGHOUT THE SCHOOL SYSTEM

2.1 Educational studies conducted

Domestic and international surveys of educational achievement have drawn attention to the underperformance of South African children in key learning areas such as literacy, mathematics and science. The Systemic Evaluations undertaken by the DoE and the Quality Learning Project have revealed that most children are performing well below the standards required by the curriculum.

- In the Trends in International Mathematics and Science Study (TIMSS) of 2002, Grade 8 learners from South Africa achieved the lowest average scores in both Mathematics and Science out of 46 countries, including six African countries.
- In the Progress in International Reading Literacy Study of (PIRLS) 2006, which measured the literacy rates at primary school level, South Africa came last out of 40 countries.
- In the Southern and East African Consortium for Monitoring Education Quality surveys of 2000 and 2007 (SACMEQ II and III), South Africa performed slightly below the average of 14 Southern and East African countries in Grade 6 Mathematics and reading.

2.2 The impact of socio-economic status on educational achievement

The cognitive performance of South African children is disturbingly low, highly unequal by international comparison, and unequal along racial and socio-economic lines. A related dynamic that remains evident in the distribution of educational achievement is the differential performance of the historically different sections of the school system, which correspond to the former racially separate education departments under apartheid. This “sub-system” dynamic is correlated with the effect of socio-economic status and poverty, but these are essentially different processes, and the data bear this out.

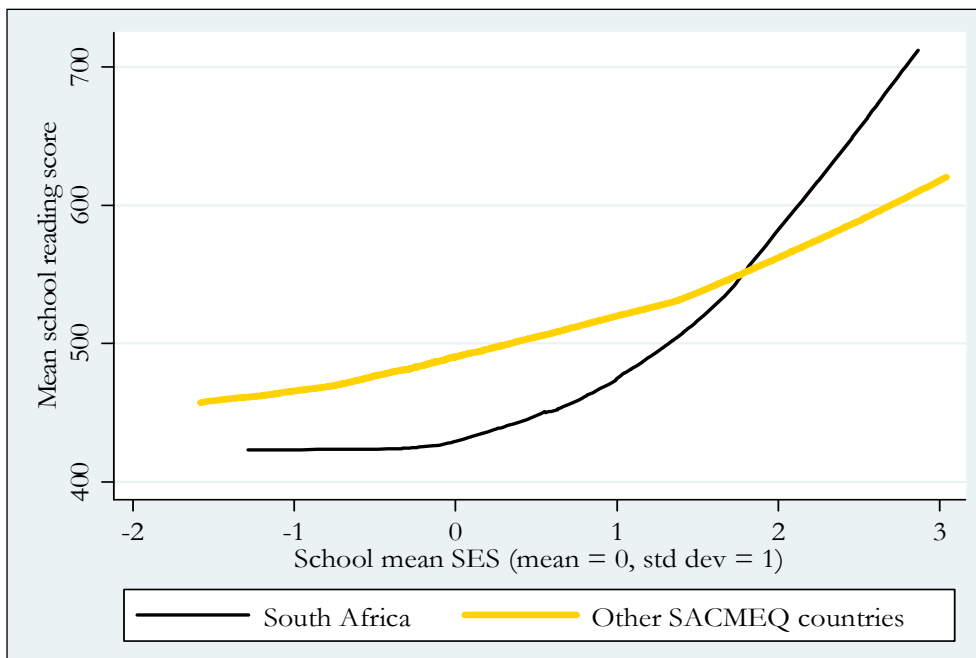
Figure 4 shows the relationship between the average socio-economic status (a household asset-based index) and the average Grade 6 reading achievement of schools for South Africa and for the rest of the countries participating in SACMEQ II combined (Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania excluding Zanzibar, Uganda, Zambia and Zanzibar, which has jurisdiction over its own school system but forms part of Tanzania). The figure shows Lowess smoothing lines (a non-parametric type of trend line). This is a type of socio-economic gradient, which is a graphical representation of the regression relationship between socio-economic status and educational achievement. The steepness of the South African line indicates that the difference between low and high socio-economic status schools is more substantial in South Africa than within the rest of the region. Poor South African children performed at a lower level than equally poor children in other African countries in this sample. Therefore, although poverty is clearly a powerful constraint to educational achievement, this figure shows that poverty itself cannot entirely account for the poor performance of South African children. We could regard this finding as an indication that there may be scope for South African schools in poor communities to achieve better results given a different set of resource inputs or school practices.

The three waves of panel data from the National School Effectiveness Study (NSES) have shown that the pattern of educational achievement by socio-economic status observed in Figure 4 is evident early on at the primary school level and remains fairly constant throughout the school years. Using Lowess smoothing lines, Figure 5 depicts the relationship between socio-economic status and literacy achievement in Grades 3, 4 and 5 (2007, 2008 and 2009) for the same sample of learners. Although the overall level of achievement improved somewhat over time (the test was identical in each year), the association with socio-economic status remained constant. Available data do not permit an assessment of the extent to which cognitive ability differs by socio-economic status prior to entering primary school, but considering the international literature on ECD and how pronounced the pattern is by Grade 3, there are strong grounds to expect that considerable

inequality already exists when learners enter school (for example, Lee and Burkham, 2002).

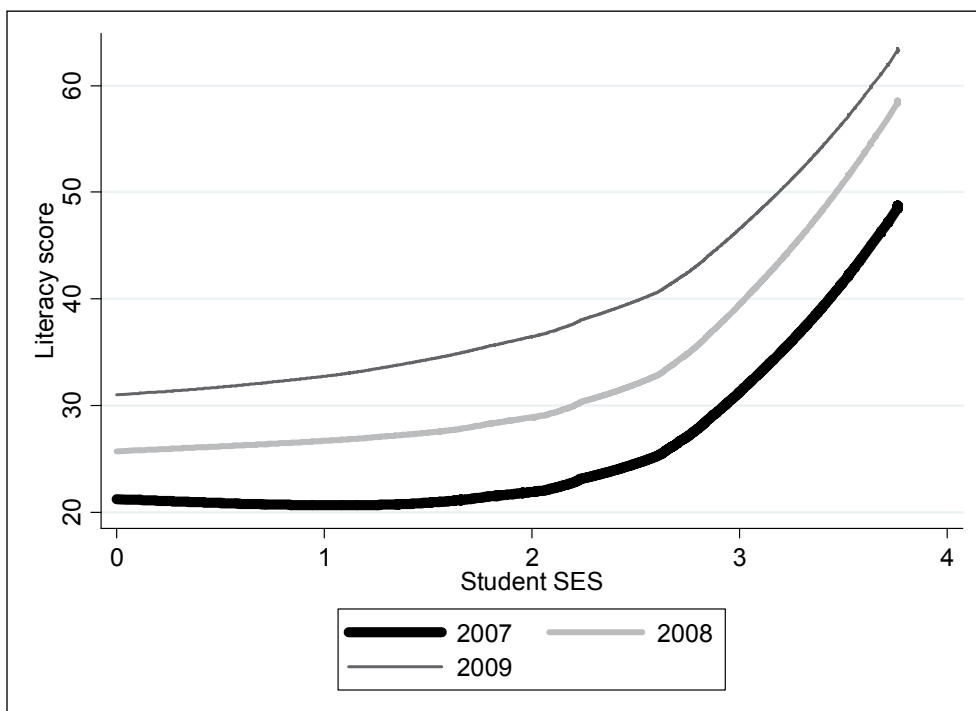
These factors point to the importance of ECD and pre-schooling to reduce overall inequalities of educational outcomes.

Figure 4: Lowest socio-economic gradients for South Africa and other SACMEQ countries



Source: Own calculations based on SACMEQ II data

Figure 5: Lowest-type socio-economic gradients for Literacy 2007, 2008 and 2009

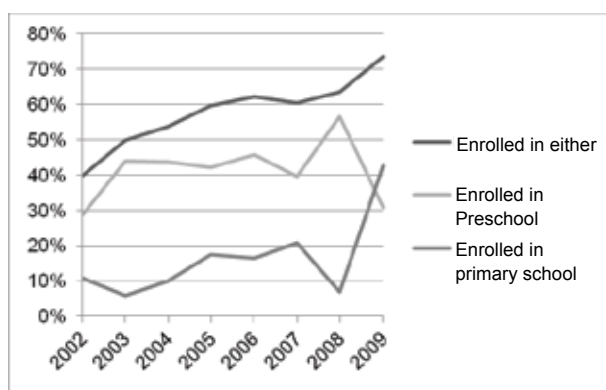


2.3 Enrolment of five-year-old learners at an educational institution

The Education White Paper No. 5 of 2001 set a target to have 100% enrolment of five-year-olds in some educational institution by 2010. Although this target has not yet been achieved, the numbers have been increasing steadily. Estimations of enrolment amongst five-year-olds should be regarded as approximate because of definitional issues around which categories of ECD should be counted and how fast the numbers are changing. Using data from the National Income Dynamics Study (NIDS) it was estimated that in 2008 approximately 60% of five-year-olds were enrolled in some form of pre-school (excluding the “day-mother” and “crèche” categories), mostly in Grade R. Using Annual General Household Survey data, Figure 6 shows the percentages of five-year-olds enrolled in pre-school, primary school, or either of the two from 2002 to 2009. The sharp rise in pre-school enrolment and commensurate drop in primary school enrolment in 2008, and then the reversal of this in 2009, is probably an artefact of the data capturing methods used in these two years, as the overall enrolment trend remained steady over the period. The enrolment of five-year-olds has clearly been increasing since 2002, even though there is still considerable ground to cover before 100% enrolment will be achieved.

Preliminary analysis of the SACMEQ III data for the South Africa sample suggests that having attended a year of pre-school is associated with higher achievement in Grade 6. Additional years of pre-school, however, do not appear to yield much further benefit. The policy upshot from this is to focus on improving the quality of pre-school education rather than expanding a poor quality of pre-schooling over more than one year.

Figure 6: Enrolment rates of five-year-olds since 2002



Source: General Household Surveys (2002-2009)

2.4 The importance of school socio-economic status

Another important finding from SACMEQ III is that while the socio-economic status of learners is associated with achievement, the more important factor is the average socio-economic status of the school they attend. The effect of socio-economic status on achievement may therefore be a two-step process. The first step is the crucial one: socio-economic status has an allocative effect in determining which part of the school system learners enter; then once enrolled in a school with a given combined socio-economic status (and largely corresponding level of functionality), the impact of a learner’s own home background is less pronounced.

Analysis of the PIRLS 2006 dataset produced the same interplay between individual and school average socio-economic status. In a further step, the South African sample of schools was divided into two sub-samples designed to proximately reflect the historically different sections of the school system. This was done using the language in which schools chose to take the reading test. Schools that chose to write in one of the nine indigenous South African languages (that is, not English or Afrikaans) were assumed to be representative of the historically black and disadvantaged part of the school system. Schools that took the test in English or Afrikaans were regarded as historically advantaged schools¹. Figure 7 presents linear socio-economic gradients for these two “sub-systems”. It is evident that learners of identical socio-economic status performed considerably differently depending on which part of school system they participated in. A large benefit accrues through moving from the poorly performing sub-system to the better one, especially for more affluent learners. However, the virtually flat line of the African language schools indicates that there is little effect of the learner’s own socio-economic status in this part of the school system.

An important finding from the analysis of PIRLS is that specific school characteristics impacted on learner achievement differently across the historically different sections of the school system. Within the sample of schools that took the test in an African language, learners in schools with close to universal participation in extended instruction time performed better. Class size was not associated with large differences in learner achievement within the Afrikaans and English sample of schools, but within African language schools excessively large classes were associated with worse learner

1 It is likely that some historically Black schools chose to take the test in English even though this was not the home language of most learners. Therefore, schools in which fewer than 35% of the learners regularly spoke the language of the test at home and in which more than 30% of learners lacked access to basic utilities (water, electricity and heating) were dropped from this sample.

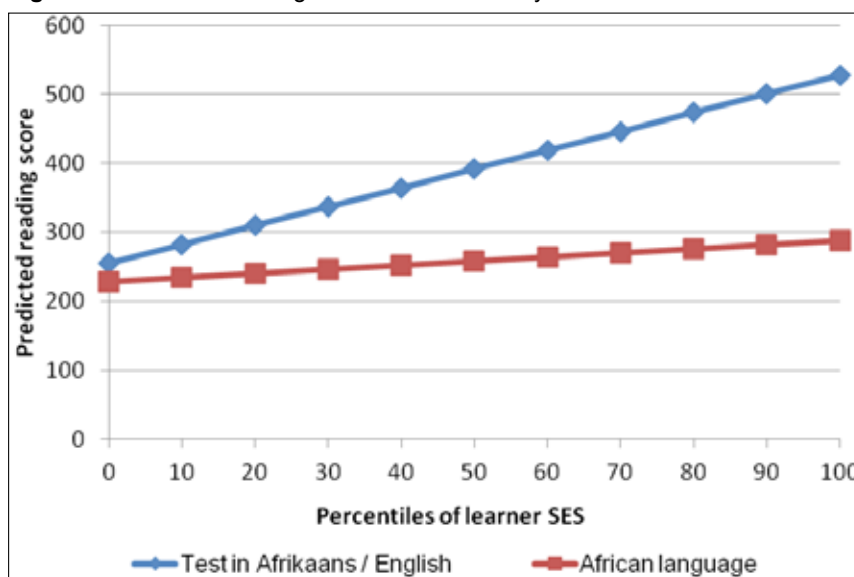
achievement. More frequent diagnostic testing and class exercises were also linked to better performance within the African language sample, but not within the Afrikaans and English sample. Although these school and teacher level characteristics were found to be associated with reading achievement, one cannot infer causation as PIRLS is a single cross-sectional dataset with no longitudinal component.

The NIDS dataset includes several unique and useful features that allow one to link the quality of schooling to outcomes at later stages of life, including ultimate educational attainment and labour market performance. After accounting for several demographic characteristics, a measure of household income and years of education, an analysis of the performance of school-aged children (15-21) in the NIDS numeracy test showed that White and Indian children still did better on the numeracy test than Coloured children, who in turn did better than Black children. The most likely reason for this performance difference between children who

had spent the same amount of time in school must be discrepancies in the quality of the institutions they attended. So, one year of education in the historically privileged and well-performing section of the school system was not equivalent to one year spent in the historically Black and Coloured sections of the system.

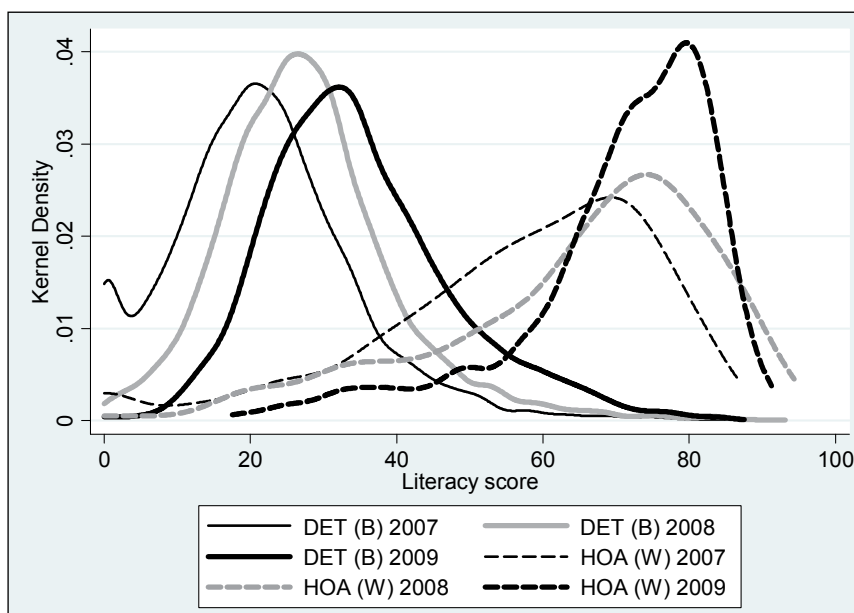
Figure 8, based on the NSES data, illustrates this differential impact of a year of schooling. The figure presents kernel density curves of literacy achievement across the three years of the NSES, for historically Black (DET) schools and for historically White (HOA) schools. The three solid lines show historically Black schools. Although the distribution of achievement improved with each year (shifting to the right), the distribution for Grade five learners in historically Black schools was still a considerably weaker distribution than that of Grade three learners in historically White schools. Therefore, by the fifth grade the educational backlog experienced in historically Black schools is already equivalent to more than two years' worth of learning.

Figure 7: Socio-economic gradients for historically different sections of the school system



Source: Own calculations based on PIRLS 2006

Figure 8: Kernel Density curves of Literacy 2007, 2008 and 2009 by ex-department



2.5 The variability of management and classroom practices across schools

The NSES dataset is a panel dataset and allows one to move closer to statements about causation, that is, the same learners were surveyed in three consecutive years. When controlling for previous achievement one can examine the effect of particular school or teacher characteristics on learning over a time interval. Another major advantage of the NSES data lies in its rich collection of management and teacher practice information. In previously available datasets the construct of “management efficiency” has been largely unobserved and is often considered unobservable. In comparison with international surveys such as PIRLS, the information collected in the NSES was more extensive and more specific to the practices and issues in South African schools.

The NSES, for example, administered brief Mathematics and English comprehension tests to teachers to get an indication of teacher knowledge. The number of teachers absent on the day of and the day before the survey, and whether the principal was absent, were recorded. Although this is a small sample of absenteeism it is perhaps more useful than self-reported data on teacher absenteeism. Teachers were asked a number of questions about their use of school time. These questions focussed on time spent actually teaching, preparing lessons, doing administration, doing assessment, and so on. Detailed information was collected from both principals and teachers about the ways in which planning of the curriculum and internal monitoring of curriculum coverage takes place. An extensive document review was undertaken in which the availability and quality of timetables, lesson plans, year schedules, assessment records, inventories and other documents were examined. Learner workbooks were reviewed and the frequency of various types of exercises and coverage of the curriculum was recorded. This indicates the depth of the survey. Tables 2 and 3 provide two examples of variables taken from the learner workbook review that point to important differences in teaching practices between the historically different parts of the school system.

Table 2: Percentage of learners in schools where more than 25 mathematics topics were covered (2008)

Ex-department	Percentage > 25 topics
DET (B)	26%
HOR (C)	25%
HOD (I)	38%
HOA (W)	75%
Total	29%

Table 2 shows the percentage of learners in schools where more than 25 Mathematics topics had been covered until the time of the survey (which varied from September to November). Fieldworkers were looking for the 85 topics that are specified in the Revised National Curriculum Statement for Grades R-9. According to this measure, curriculum coverage in Mathematics was substantially less in historically Black and Coloured schools than in historically White schools. Although the result for the historically Indian schools is shown in the table, conclusions cannot be drawn from this due to the small number of historically Indian schools in the sample. Table 3 shows the frequency of literacy exercises found in learner workbooks. An important aspect of school quality may therefore lie simply in covering curriculum and getting learners to complete work.

Table 3: Mean number of literacy exercises found in the “best” Learner’s Book (2009)

Ex-department	Mean number of exercises
DET (B)	33.43
HOR (C)	62.40
HOD (I)	72.44
HOA (W)	75.21
Total	39.58

It is necessary to estimate the effects of all these aspects of school and teacher practice in a multivariate framework. This has been done (Taylor, 2011) but not included because of the technical nature of the methodology of these models. It is also important to draw implications for policy in order to do some conceptual work on how to interpret these aspects of school management and teacher practice that are strongly linked to learner achievement. In general, many of these variables should probably be regarded as indicators of effective management and teaching rather than as policy levers which, if enforced, would generate substantial improvements in learner achievement. A school in which timetables are readily available and well-used is probably efficiently managed in a holistic way. Stipulating and monitoring the use of timetables in itself would probably not lead to significant change in the overall effectiveness of schools.

3

THE IMPACT OF POOR QUALITY EDUCATION ON LABOUR MARKET OUTCOMES

3.1 The human capital model

Vast international and growing South African literature use so-called earnings functions to estimate the impact of education on the probability of employment and on earnings. These techniques usually model the effect on earnings of years of education, work experience and a selection of other characteristics hypothesised to affect earnings, such as race, gender and unionisation. The theoretical underpinnings of this approach lie in the human capital model as espoused by Schultz (1961) and Becker (1962) in the 1960's. The human capital model suggests that education improves an individual's productivity, which is rewarded in the labour market by higher earnings.

The human capital model predicts diminishing marginal returns to education, that is, each additional year of education yields a smaller return in the form of higher earnings. The South African labour market, however, does not conform to this pattern. Both Lam (1999) and Keswell and Poswell (2002), amongst others, have shown that returns to education prior to Grade 12 are very low and that strongly increasing returns accrue with the completion of matric and for each year thereafter. A major reason for this structure of returns is the combination of high rates of enrolment and easy grade progression prior to matric with the lack of any official qualification before matric. Household survey data show that more than 50% of South African youths do not hold a matric certificate. Given the variable quality of South African schools and the prevalence of lenient and often random grade progression practices (as demonstrated by Lam, Ardington and Leibbrandt, 2008) there is nothing to signal the ability of these individuals to potential employers. This situation would be improved somewhat by the introduction of a standardised national assessment in Grade 9 accompanied by a qualification.

3.2 Poor assessment standards

Standardised assessments early in the school system, such as the Annual National Assessments (ANA) being introduced, may improve assessment practices within schools. Van der Berg and Shepherd (2010) demonstrate that Continuous Assessment in most of South Africa's schools is far too lenient and unreliable as a sorter amongst learners of differing ability. Learners in these schools are disillusioned regarding their preparedness for the national matric examination.

Another consequence of poor assessment practices, and therefore a lack of accurate feedback to learners, parents and teachers, is inappropriate subject choice. A simulation exercise using National Senior Certificate data from 2009 revealed that a number of learners who failed matric would probably have passed if they had taken different subject combinations. It was estimated that the matric pass rate would have been 15 percentage points higher had learners switched from certain non-language subjects to other non-language subjects. In particular, the switch from Mathematics to Mathematical Literacy would have led to a large number of matric passes. The benefits of subject switches were estimated to be greatest within the poorest quintile of schools, which is where unreliable assessment practices have been shown to be most severe. To suggest that learners from poor backgrounds not take Mathematics would be contentious, but some learners would have produced better results if they had been advised not to take Mathematics. Conversely, there may have been other learners who perhaps should have taken mathematics but who did not due to inaccurate feedback about their Mathematical ability.

In summary, weak assessment practice is clearly a key aspect of low quality education that negatively impacts on the labour market eligibility of individuals through inadequate preparation and sub-optimal subject selections for the matric examination. By communicating the standards required at a particular grade to teachers and parents, standardised assessments could be expected to improve this aspect of school quality.

3.3 What role does race play?

Attempts to conclusively demonstrate the effects of low quality education in earnings differentials have been limited in the South African context by data availability. Internationally, attempts to account for the quality of education in earnings functions have suggested that this may be even more important for an individual's earning capacity than years of education (Murnane et al, 2001; Hanushek and Woessman, 2007). South African studies not including any measure of education quality have found large and persistent racial employment and wage gaps (Burger and Jafta, 2006). To some extent, these racial gaps can be attributed to productive characteristics, such as years of education. There remains, however, a large unexplained component, often assumed to represent labour market discrimination. In the South African context it is likely that this large unexplained component of the racial wage gap is due, at least in part, to the lower quality of education received by most Black workers.

Two strategies were adopted in this research to directly identify the role of school quality in earnings differentials. In the first strategy, a synthetic model was generated in which data for cognitive skills, school quality and

labour market earnings were created using a Monte Carlo simulation based on the known patterns of matric achievement and school dropout rates from household surveys. This synthetic model indicates that differences in school quality account for roughly half of the unexplained component of the racial wage gap.

In the second strategy, information from NIDS, which include both labour market data and a numeracy test was used in an attempt to demonstrate what the synthetic model had suggested. The intention was to estimate the effect of school quality, using numeracy achievement as a proxy, after controlling for years of education and other characteristics. This model has however not yielded the results that were hoped for because of complications with the numeracy test data. A number of selection processes were at work simultaneously in determining who participated in the numeracy test and which version of the test they wrote. Attempts to deal with these selection biases could not fully resolve this problem. Therefore, despite mounting evidence that disparities in school quality are driving a significant proportion of South Africa's income inequality, it has not been possible to conclusively demonstrate this using current available data.

POLICY IMPLICATIONS

4 POLICY IMPLICATIONS

- For existing income inequality to be addressed it will be necessary to deal with pre-labour market inequalities, specifically inequalities in the quality of education being received. The effectiveness of affirmative action policies at the level of the labour market will always be limited by a school process that leaves those from poor backgrounds with an on-going skills deficit.
- Given that wide inequality on the basis of socio-economic status in literacy and numeracy is evident as early as Grade 3, it is vital that substantial efforts are directed to improving the quality of education in primary schools and in ECD. The trend towards greater enrolment in pre-school should be pursued to completion. Preliminary evidence would suggest that ensuring one high quality year of pre-school is likely to be more beneficial than extending the pre-school phase over more than one year.
- One feature that distinguishes effective schools from less well-functioning schools is the extent of curriculum coverage and use of Mathematics and language exercises, as evident in learner workbooks. Teacher professional development, official curriculum statements and teaching aids such as textbooks and workbooks should be chosen and designed to promote frequent exercises and curriculum coverage.
- Effective management practices relating to the use of available school time, the management of resources such as textbooks and internal curriculum planning and monitoring should be encouraged through supportive training. However, such practices often serve to flag excellent school leaders who ensure that a variety of other effective practices not observed by surveys are followed. Therefore, policies that aim to attract highly motivated and effective leaders to the position of principal may be more effective, although politically and practically harder to implement.
- Standardised national assessments should be introduced prior to the matric examination. The ANA are a positive move. These should be designed and implemented to facilitate accurate information to learners, teachers and parents regarding the true performance level of learners. This could be expected to enhance accountability between schools and their various stakeholders and promote more reliable assessment practices within schools. This may help curb the phenomenon of lenient and largely random grade progression throughout most of the school system followed by high dropout rates towards the end of secondary school and high failure rates in the matric examination. More reliable assessment and feedback would also contribute to better subject choices. Ideally, a standardised assessment at the end of Grade 9 should be linked to an official qualification. This would provide some educational currency to the large segment of South African youths who do not attain a matric certificate and therefore have nothing to signal their skills.

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