

# From Uneducating to Educating South Africa: some thoughts on new policy imperatives in education

Johannes Fedderke

ERSA & Department of Economics,

University of the Witwatersrand.<sup>²</sup>

**ABSTRACT:** This paper examines the policy implications of earlier empirical results found to hold for the South African schooling system. Particular emphasis is placed on the importance of developing appropriate incentive mechanisms for teachers. Central to these incentive mechanisms is the suggestion that teachers' rewards be adjusted to reflect the quantity of the output they produce; the need for more standardized testing and a well-qualified inspectorate to monitor the output of teachers.

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## 1 Introduction

Every year December and January bring with them predictable refrains in South Africa: the schooling system again is forced to report poor performance in its showpiece output statistic. Matriculation pass rates plumb yet more abysmal depths in some provinces. Show a shaky holding of the (in any event poor) line in other provinces. In yet others improvements in the matriculation pass rate are of an order that lacks all credibility - at least sufficiently so to lead to their being overturned six months later at considerable cost to pupils, teachers and tertiary institutions.

Such a performance of the South African schooling system is not such as to permit self-satisfaction. And it is here that the predictable refrains begin. Some provinces smugly point to their superior output performance - while offering little by way of suggestions as to how the rest of us might learn to do better. A cacophony of voices is raised alleging continued inequitable distribution of resources as the source of the problem - read as subtext: we need more by way of money. More suggestions on root and branch reforms to the educational system crowd the stage - all of which requires lots of consultants (guess who?) and yet further resources. And some suggest that a little sweeping under the carpet could well do the trick - do away with the source of the embarrassment (standardized examinations which produce the infuriatingly poor pass rates) and under the resulting veil of ignorance the pressure all round might be a little less.

Some (maybe all) of these suggestions are based on the soundest of intentions, and many undoubtedly have their merits. Some of our provinces do better than others and we are well advised to ask why this is the case. Poor distribution of resources surely can lead to poor incentives, and poor outcomes. Reforms are pressingly needed.

But suggestions at such levels of generality remain of scant succour to the policy maker. Questions on what, precisely, it is that some do right and others do wrong remain poorly illuminated. Is it the length of the athletics track, the success rate of the football team, the number of teachers, their qualifications, the ratio of pupils to teachers, the type of teachers (English/math/ballet) that does the trick? And just how much do we need to improve in the various dimensions in order to get pass rates to acceptable levels? What is the cost about to be - and who is best positioned to pay the cost? If resources are poorly distributed, then from where do we need to take, and to whom do we need to give? And just how much of such redistribution is required?

What will be the effect on those parts of the system that are functioning well, and will the poorly functioning sections improve dramatically, slowly, weakly, or not at all? The upshot of all such questions: reform yes, but how much, where, to what, and at what speed?

The policy maker does not have the luxury of grand hand waving: concrete suggestions, precision, some sense of the cost and benefits of the intervention are what is required.

This paper is concerned with providing some concrete policy suggestions for South African schooling, and proceeds on the basis of some earlier research results. In two earlier papers our concern was with some of the concrete characteristics of the South African schooling system, and with links between some very specifically conceived inputs into schooling, and the outputs they generate.

In Fedderke, De Kadt and Luiz (1999) we provided a detailed descriptive account of the white, black, Asian and coloured schooling system in terms of pupil teacher ratios, levels of real per pupil expenditure, teacher qualifications, matriculation pass rates, and provided some account of the proportion of pupils taking mathematics through to the final year of schooling. The study was ambitious, since it covered time span from 1910 through 1993 for the white schooling system, and for long spans of time (up to 1927 - 93) for the other schooling systems also.

Yet the obvious question in the context of the present paper is what relevance such long historical time series might possibly have for the formulation of current policy? Social structures such as schooling systems are not notable for their flexibility, and tendency for rapid transformation. Indeed, the policy puzzle that we face in the context of schooling output in South Africa is precisely that it is proving rather difficult to turn around a system that is by common consensus not performing well. Understanding the structural determinants of a system such as schooling therefore requires a good grasp of how the various salient features of the schooling system have evolved over time. Historical information, far from being irrelevant is central not only to developing an understanding of how the present has come to be shaped, but also to understanding how institutions such as schooling continue to function in the present.

One illustration of this comes from Fedderke and Luiz (1999) - which explores the features of two educational production functions in South Africa: one for white schooling, one for black schooling. Given the historical evidence, we can identify which inputs into the educational process generate

returns, and which do not. Or, putting the matter slightly differently, we are able to identify where the schooling system is using resources efficiently, and where it is not - with consequent clear policy implications.

It is on the basis of this evidence that we now proceed to a number of deliberations on what some appropriate policy responses in the South African context might be. We do not make the claim that the proposals are comprehensive - merely that we have good reason to believe that the empirical evidence suggests that these might be important issues to consider.

## 2 So what do we know?

Before we proceed with the advocacy of new policy directions, let us recap what our earlier research tells us about the characteristics of the South African schooling system. Three important general features emerge from the work.

First, the historical-descriptive work confirms what all anecdotal evidence tells us: there exist strong quality differentials between different parts of the schooling system. The differentials came to be racially defined through the implementation of apartheid policies, but the differentials continue to exist to the present. Pupil teacher ratios, per pupil expenditure, and the quality of teacher qualifications show strong variation across white and black schooling, suggesting that the quality of the inputs into schooling shows very strong differences between the two parts of the schooling system. But far more importantly, the quality variation between black and white schooling shows up even more dramatically in the output of the white and black schooling systems. White matriculation pass rates show steady and sustained improvement over the full 1910-93 period, while black matriculation pass rates have never reached those attained in white schooling, and have been in decline since 1976.

The upshot of the historical evidence is that the schooling crisis in South Africa is not new. It has well established structural roots, and if we are to understand the causes of the poor performance of the schooling system, a precise understanding of the workings of the schooling system is imperative.

The second main implication of our earlier research findings is that inputs into schooling production do matter. Better pupil teacher ratios, and higher real per pupil expenditure do succeed in producing better matriculation pass rates, and the returns to such improved inputs into educational production

are strong - potentially more than proportional.

There is an absolutely vital qualification to this finding, however. Improvement in inputs into schooling does not guarantee improved outputs. Under some circumstances, improved inputs lead to no improvements in the output measures whatsoever. The South African experience suggests that inputs will be rendered effective in influencing output where the governance structures surrounding schooling are such as to improve information flows between the users of the educational system, and the providers (and particularly the policy makers) of educational services. Moreover, the educational providers have to have an incentive to respond to failure in the provision of educational services. Where inefficiency creeps into the provision of educational services, where resources are not being used to good effect, it is important that policy makers are informed of the failure in delivery, and that it is in their interest to respond by eliminating the failure. Information delivery independent of the schooling system itself, which relies on feedback from parents, pupils and other users of the schooling system helps the policy makers to identify problems as quickly as possible. Being accountable to the users of educational services provides an incentive mechanism to ensure that problems are not only identified, but also addressed by policy makers.

What all of this means is that while resources matter, money is not the only consideration. Indeed, a comparison of South African educational expenditure with that of other countries confirms what our analysis has already established: that South African is getting very poor value for money. Resources are inefficiently used in education, and the chief priority must therefore be not to increase expenditure yet further, but to make sure that the current levels of expenditure are used to the best possible effect. There is a lot of slack in the system, and the slack should be removed before more good money is thrown after bad.

### 3 So what problems can we hope to address as policy makers?

So much for what we have come to know on the basis of previous research. But identifying problems is not to necessarily identify valid policy questions - as we have already noted in our introductory remarks.

To engage useful policy questions we need to consider over what time scale we are interested in the policy question? If the time horizon is infinitely long,

of course we would like all the problems we have identified to be eliminated, and we even have enough time to do so. Here the answers are easy - you solve all problems, and considerations of what to do when, in what order pale in significance.

But unfortunately our needs are more pressing since in practical policy contexts we do not have the luxury of infinite time. And that in turn means that we have to prioritize. What should come first and why in our policy objectives? Is it to create a schooling system that treats all pupils equally in order to redress past wrongs, and regardless of outputs from the system? Is it to safeguard the quality of output from the schooling system at all cost, in order to ensure the continued competitiveness of the South African economy and its labour markets in increasingly globalized world markets?

Both sets of arguments have their validity, and so it is distressing to see that they appear to be mutually exclusive. Equity in the popular South African debate is frequently seen as being achievable only at the expense of standards. And symmetrically, maintenance of standards frequently comes to be associated with the exclusion of those that have had poor prior preparation in their education.

Yet consideration of some international evidence suggests that such a dichotomy is drawn too sharply. International studies of long run economic growth confirm that education is a vital determinant of the ability of the economy to improve the average welfare of its citizens over time. Moreover, such findings suggest that what matters for long run growth is both the quantity and the quality of the education that is provided for the economy.<sup>1</sup> So the choice we face is not one of either equity or quality. In the South African context the equity demand is inherently the demand for greater quantity and quality of education for the previously disadvantaged. It is always quantity and quality that is required, for merely to provide additional quantities of education to the previously disadvantaged does not yet address their need to be able to compete in what is increasingly a labour market which is no longer simply South African, but international in character. To best improve the long-term sustainable prospects of all of our people, means that we will be forced to provide them with more by way of both quality and quantity of education. Backers of equity in education - if they are truly serious about equity - must also address the question of the quality of education. The

<sup>1</sup>See Hanushek and Kim (1995) - who note that the quality of education is eight times as powerful a predictor of long run growth as the quantity of education.

same is true for the defenders of immutable standards. The argument cuts both ways. If both quantity and quality are important to long run growth prospects, then insistence on the maintenance of "standards"<sup>2</sup> for a precious few, at the expense of the majority of the population, will do little for labour productivity as a whole, and hence will not serve to make South African production of output internationally competitive. Forty years of apartheid are after all ample evidence to this effect.

So we have no choice: as long as we wish to improve the long term welfare prospects of our population, our education system must address urgently the need for improved delivery in both quantity and quality dimensions.

The real question that we therefore must face as policy makers is how we can get the resources that are currently used to go as far as possible in order to achieve the aim of improving the quantity and quality of output from our educational sector? Efficiency of resource use and the provision of incentive mechanisms that will ensure that all participants in the educational sector work toward the same ends of improving educational output are of the essence.

#### 4 So how do we get from where we are, to where we want to be?

By defining where it is that we want to be.

Such an answer might strike one as a trivialization of what is patently a complex issue - so let us explain what we mean.

The crucial point is that we need to think in terms of the objectives that we wish to achieve. What is crucial in the educational process is the output that is being produced: it is the kids with improved skills and abilities, who are more able to compete in the labour market that are of the essence, not the pupil teacher ratios, the physical infrastructure, and the real per pupil expenditure per se. All of the latter are inputs into the process of educational production. All are means to an end. And it is the end of high quality educational output that counts, since what we wish to achieve is more kids with more ability to succeed in globally competitive contexts.

<sup>2</sup>One might add that the so often vaunted "standards" that are to be maintained are hardly that wonderful - see the discussion in Fedderke, De Kadt and Luiz (1999), and Klitgaard (1993).

Remember, it is the long term development prospects of society that count, not the nitty-gritty minutiae of the educational process itself.

Once we know what it is that we want, the rest of the solution follows of its own accord. But importantly, what remains is that all participants in the educational production process are positively rewarded whenever they produce the outcomes that are identified as priorities. Under such circumstances it comes to be in the personal self-interest of the participants in educational production to actively seek out and attain the goals set out as policy priorities.

In short, the incentives that the producers of educational output face must match with the policy objectives that are identified in educational policy. And this explains the sentence with which we began the section - we need to be able to identify where it is that we wish to land up, when we design the incentive structure that educational producers face.

That is the idea - but is it practicable? One problem we might identify with the incentives story is that it presupposes that we can actually tell whether the output of the educational process is being produced, and by whom. In South Africa, the output of schools is measured in a way that allows us to compare the performance of different schools only at the conclusion of the entire schooling process: matriculation pass rates. How can we possibly compare the performance of teachers before this point of feasible comparison? And why are we to accept that it is only the dimensions measured by matriculation examinations that count for comparison? Surely other forms of output issue from the schooling process?

Such concerns are valid, and important in the current context.

If we wish to reward the producers of educational output where they produce the right sort of output, then it is important that they be treated fairly, that we make every effort to be sure that those rewarded are deserving of the reward.<sup>3</sup> But there is no reason why the matriculation examination is sacrosanct, why the final year of schooling need be the only year in which standardized testing occurs.<sup>4</sup> Indeed, our proposal is that it is desirable that standardized tests are conducted more frequently, throughout the schooling process in order to assess the progress of pupils, and the quality of output produced by schools and teachers throughout the full trajectory of educa-

<sup>3</sup> Indeed, if we do not ensure this, incentives may become perverse.

<sup>4</sup> The obsolete Junior Certificate Examination in South Africa attests to the possibility of more frequent standardised testing.



tional production. One idea might be to have standardized tests at the end of Form 5, Form 7, Form 10, and Form 12 - or perhaps even earlier.

But would this not place undue burden on the teachers who are teaching the forms subjected to national, standardized scrutiny, making them bear the burden of poor teaching that may have gone before? Not necessarily. International studies suggest that the best incentive schemes are defined not on an individual level, but for teams. Thus the reward structure here might be defined in terms of all teaching staff that are responsible for the years of teaching immediately preceding a year of standardized testing. Thus the incentive of the teaching teams would be to contribute toward the performance of their pupils despite the fact that the standardized test may be some years hence. Teams of teachers responsible for given standardized tests would have the incentive to self-monitor, to monitor each other, and even to assist one another to improve their collective performance. Innovation and positive externalities might well be an added benefit.

But would the conduct of standardized tests on so frequent a basis not place undue resource demands on the schooling system? After all, the matriculation examinations already require a large resource investment from the educational sector. How are we to cope with not one, but four (or more) standardized tests? Well, not all standardized tests need to be conceived of quite as comprehensively as the matriculation examination - and modern technology alters the resource implications of standardized testing substantially. For instance, most standardized tests might focus on core literacy and numeracy skills of pupils, and do so in terms of multiple choice technology of examinations. Such examinations can be readily marked by means of computer technology, much less time and labour intensive than detailed individual scrutiny of scripts, and above all less liable to subjective bias.

One downside of standardized testing is that such tests identify only a very restricted set of skills of pupils - and education can plausibly be argued to be about more than just numeracy and literacy. Discipline, a culture of learning, social integration and tolerance, aesthetic appreciation, environmental consciousness, are but a few of the additional competencies we might wish future generations to develop. Standardized tests may indeed be inappropriate as a means of measuring such dimensions. Yet there is no reason why the measurement of output need be restricted to standardized tests. Classroom evaluations by a well-trained inspectorate<sup>5</sup> can be an important

<sup>5</sup>I understand the correct term would now be Teacher Development Facilitatorship.

additional source of information about the quality of the teaching and learning that teaching teams are providing. Parents, pupils, might form additional sources of information, if afforded channels of information transmission independent of either teachers or the inspectorate. Thus a more accurate picture of teacher attendance in classes, and the general quality of teaching can be gained.

Perhaps the most serious objection to performance related incentives might be that they would systematically discriminate against the most disadvantaged schools and pupils, perpetuating inequality. For instance, one important reason why schools in the rural far Northern Province might be doing badly is not because the teaching is poor, but because the human capital of the parent body is poor. International studies show that a strong predictor of the educational performance of children is the stock of human capital of parents. Pupils at the most expensive private schools may be performing well only partly because of the quality of the teaching to which they are being exposed, and substantially because they may have acquired a culture of learning from their parents, who have themselves been exposed to many years of education.

This is a serious problem, since it would have the effect of seriously disheartening the teaching body in disadvantaged areas, and would serve to strengthen the inequalities already present in the system. The most advantaged children would be yet further advantaged by virtue of the additional resources that would be channeled to them.

For the incentive mechanisms to produce the right kind of results, relevant "background" factors, such as the average income of the parent body, average educational attainment of parents, must be adequately taken into account. Schools and teaching teams must be allowed to perform on a level playing field. Other things must be held equal, so that we can identify the schools that are performing well despite the poor resources that they have at their disposal, despite the poor physical infrastructure that they have at their disposal, and despite the poor educational attainment of the parent body. In order to be able to provide such a leveling of the playing field, it is important we understand what the "other factors to be kept equal" are - and more research may well be imperative here (see the following section of the present paper on some suggestions in this regard).

I hope readers will forgive me if I use the slightly more parsimonious label - here and throughout in the argument.

So the implication of the argument this far is that in order for the educational producers to be rewarded for producing the right sort of output we need to be able to tell when it is that the right sort of output is being produced, after we have controlled for possible background variables.<sup>6</sup>

Two last points are worth raising at this juncture.

First, it is all very well rewarding performing teaching teams for their success. Will this not seriously affect the morale and motivation of those teaching teams that are not being rewarded? To avoid such problems we might provide active assistance to teaching teams that have not performed. Provide them with insights into why other teaching teams have succeeded - against the odds. What they can do to perform better in future. Radio and TV technology might provide additional means to convey more information to schools on a regular basis, a vehicle that has proved successful in other countries as a means of widening access to education. "Mock" standardized tests might be made available to schools to allow the teaching teams to assess and monitor their progress - and allowing them to send early warning signals to potential sources of help well in advance of any debacle. Exchange programmes between schools performing well, and those that are performing poorly, to allow teachers to improve their skills and performance, might be one such help mechanism amongst many.

Second, one reason why teaching teams might come to perform badly in standardized tests, is that core skills might simply be absent from the teaching staff. Math teachers are one obvious case in point. Here the relative scarcity of various types of teachers will have to be recognized. Math teachers are scarce because labour markets signal very much higher rewards elsewhere. The net result: too few math teachers, too poorly qualified to do pupils much good. There is only one solution here: pay teachers in accordance with the price that is appropriate to the relative scarcity of their human capital.

## 5 So what else do we need to know?

Many things, is the immediate answer. But in research activity as elsewhere resources are constrained, and we cannot provide all the answers immediately. So again, the important question here is how we should focus our energies in knowledge garnering. Here the pressing policy prerogatives discussed in the preceding sections can be useful as a guide.

<sup>6</sup>And by implication, when the wrong sort of output is being produced.

From previous research we have obtained some insight into what makes a difference to educational outcomes. High quality inputs into education as measured by pupil-teacher ratios and real per pupil expenditure do make a difference as long as they are used under the correct institutional mechanisms. But many educators emphasize the importance of additional features of the educational process - features that we have not been able to capture in our historical data. Some educators go further and attach over-riding importance to factors such as the motivation and work ethic of teachers, the culture of discipline and learning that principals of schools generate in those that they are responsible for.

Such insights of education experts are important, and need to be taken very seriously, since they represent the outcome of in-depth experience of a process characterized by great complexity. More inputs from education experts is therefore desirable, and should be encouraged. At issue here is what else might come to make a difference to educational outcomes. Identifying what makes a difference, at what stage, and in what way in the educational process can only be aided by a dialogue between experts from different disciplines.

But the identification of a list of factors that make a difference to educational attainment also raises important new questions. Which of the factors identified make the most difference, by how much, and are they all necessary for high educational attainment or are they sufficient for a good educational system? In conditions where resources are scarce, such questions are not matters of academic indulgence, but crucial in ensuring that the greatest possible human capital accumulation benefit attaches to the greatest possible number of recipients.

So what is the practical upshot of all of the preceding deliberation?

First, it is both useful and important to generate a list of what we believe might make a difference to educational outcomes. South Africa has the advantage of a number of data sources that place it in a relatively unique position internationally to gain an understanding of the educational process. EDUSOURCE has collated a GIS database on all schools in South Africa, with detailed information of infrastructure available to schools themselves, and the proximity of schools to wider social infrastructures. Comparison of this information with the educational attainment of the schools would provide one means of gaining a better understanding of how influential at least the physical infrastructure of schools is to success in generating educational output.

But we could go further. Matriculation pass rates in South Africa continue to form one means of subjecting schools to a standardized comparison. This would allow us to identify the 100 best, and the 100 worst schools in the educational system, and to undertake a far more clinical examination of what goes on in each. One problem with a "raw" comparison would be that the 100 best could probably be identified without so much as a glance at the matriculation pass rates: the Hilton's, St.Mary's, St.John's, Bishops' would feature disproportionately in the top 100. And the Guguletu's, Kwa Mashu's, Alexandra's disproportionately in the bottom 100. In effect, we would not be comparing like with like. What allows St.John's to outperform Alexandra without so much as trying, is not necessarily that it is engaged in better educational production, but that the pupils attending St.John's come from human capital intensive households. They have a headstart over the Alexandra kids, simply by virtue of the parents that the two sets of children have, and their ability to transfer human capital in extra-school environments. Now that this should make so much difference to the educational attainment of children is important and interesting in its own right. But where we are interested in the educational production process as such, it obscures rather than clarifies the picture. The really interesting cases are those schools that are generating good matriculation results despite the poor prior preparation of the children that attend them. Schools that have implemented an educational production process that allows their pupils to maximize human capital accumulation, regardless of background. It is from these schools that we have the most to learn from a policy perspective.

Fortunately there is a means of controlling for the background information. Census data allows us to control for the per capita income, and hence by proxy the human capital endowment of the parental household from which children at public schools come, while school fees allow for a similar exercise for private schools. We could identify the 100 best and 100 worst schools net of the background factors that advantage some, and disadvantage others.

This would allow for detailed clinical examination by means of both quantitative and qualitative techniques of what distinguishes the two sets of schools, of how it is that the one sets generates very high rates of return on inputs, while another generates poor rates of return. The role of school principals, of parental involvement, of parent-teacher bodies, the views of pupils, teachers and other stake-holders could all be included in the investigation. As could the physical infrastructure, the qualifications and experience of teachers, pupil-teacher ratios, the budgets and spending targets of the

schools. Qualitative techniques of investigation would be particularly useful in eliciting information on teacher attendance and work ethic (interviewing the pupils), and of characterizing the attitude of school principals. Quantitative techniques would have much to offer in establishing the relative rates of return to various types of input into the education process.

Knowing more about schools, and how they go about schooling is one imperative - and we have suggested one methodology by which we might wish to proceed. But the output of a schooling system does not depend on the quality of the schools in isolation. Wider institutional structures, particularly the quality of provincial administration is a further tier in need of improved understanding in terms of its impact on educational attainment.

A number of questions are significant here for our purposes:

- 2 How well is the school inspectorate being maintained? How regular are the visits paid to schools? How accurate are the assessments provided by the inspectorate? How does the provincial administration check the quality of the inspectorate's reports - how does it know they are true? What incentives does the inspectorate have to provide detailed and accurate assessments - and how open are they likely to be to undue and inappropriate influence? How much is the inspectorate actually listened to, and to what extent do they go through the motions?
- 2 How can we design institutions that facilitate the flow of good information from the users of the educational system, (pupils and parents) to the policy makers that can make a difference. Teachers have both the capacity and the incentive to put their own efforts into as good a light as possible. Accurate, truthful reflections of their achievements will not be easily obtainable from the teachers themselves. So how can we provide a checking mechanism on the self-reporting of the teachers, in order to be able to provide the right incentive mechanisms, rewarding teachers that do perform, punishing those that do not?
- 2 Standardized tests form one means of comparing the teacher's performance. But what standardized tests, how often applied, and by what medium? And which background factors (e.g. parental education) do we control for, and for which do we not? Does it make sense to use multiple choice questions, easily marked on a completely standardized set of criteria? Should the testing proceed by means of computerized test banks for those schools that have access to electricity, and by other

means for schools that do not? Or should all schools march at the same pace in using the most advanced technology available in order to conduct standardized testing?

- 2 Subjecting teachers to incentive mechanisms to encourage better performance raises questions of its own:

How soon should positive and negative incentives set in? After only one sound or poor result, or after a track record of failure or success?

How do we ensure that those teachers that are not fairing well, have means at their disposal in order to improve their performance? Do we provide sabbaticals at schools that "work", do we provide years more university training, do we parachute in the experts to help directly, on site with all parties involved?

What sort of help are teachers currently doing poorly need?

What is the appropriate size of the positive and negative incentives to be? Does good performance merit a 50% or a 10% bonus, or something altogether different?

There are bound to be many more questions that face us - and as we open each of the research agendas, more questions are bound to arise all the while.

But the above wish-list provides at least a purchase on the central proposition that informed the policy proposals outlined above: the need to rely on positive and negative incentive mechanisms, and the consequent imperative to obtain accurate information about the performance of teachers, adequately controlling for appropriate background information.

## 6 Conclusion

A great deal of what is proposed in this paper is bound to be either controversial or unpopular, or both. In meeting such responses, we make two claims. First, where the claims are controversial, we are open to counterargument. However, and this is an important qualification, such counterargument should be based on sound empirical insight. It is not enough to rely on wishful thinking, or anecdotal evidence. South Africa already spends enormous

resources on education - and still we do not get value for money. Our pupils continue to do badly in standardised tests, and in international comparisons. We need to move to a situation where the educational sector can in all honesty say that what resources are being used presently, are being used wisely, efficiently, and to the best possible ends. Currently the empirical evidence simply points in a radically different direction: resources are wastefully and inefficiently deployed, and the poor, the disadvantaged, the historically discriminated against members of South African society have every right to demand of the educational sector that it do better - before we employ more of the limited resources they too would like to lay claim to.

On the other hand, the evidence is not all bad. We have suggested that parts of the educational system are functioning well. We have an opportunity to learn from parts of the schooling system that are functioning well, in order to allow us to help poorly performing sectors to do better. We have suggested that it is worth while to rely on the expertise of educational providers in improving performance. The people most intimately involved in teaching, are also the people most likely to be able to provide solutions to problems. They best know the problems, the difficulties, and also the means by which to resolve the constraints. Central planners facing the diversity and plurality of South African society are at a decided disadvantage in this regard.

But the educational providers need to be enabled to achieve these objectives. They need to be rewarded when they do well - and they need to be helped so that they can do well. The argument of the present paper culminates in a plea to provide the incentive mechanisms to educational providers, which rewards the outputs that we know to be the most effective means of eliminating long-term inequality and deprivation. We need to shift our attention from inputs into education as ends in themselves, to outputs as the enabling dimension of education.

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