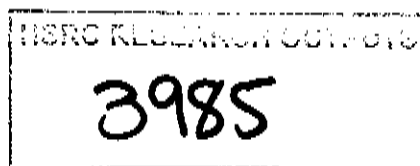


The Quality Learning Project Lessons for High School Improvement in South Africa

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1. Introduction

While large scale school development programmes have become relatively common in South Africa within the last decade, the Quality Learning Project was the first such intervention at the high school level. Working in 524 high schools spread across all nine provinces between 2000 and 2004, the QLP was a project of the Business Trust, a partnership between the national Department of Education and the corporate sector. It was managed by JET Education Services, while interventions were conducted by ten non-government organizations.

The project was the subject of an extensive evaluation conducted by the HSRC, consisting of a Baseline Study undertaken in 2000, a Mid-term Review in 2002 and a Summative Evaluation in 2004. The dual functions of this external evaluation were to provide formative insights to the participants at key points in the life of the project, and to assess its impact on management, teaching and learning in target districts, schools and classrooms. The present report draws heavily on the Summative Evaluation Report, while avoiding its technical detail. The interested reader is referred to the various evaluation reports for further detail (HSRC, 2001, 2003, 2005a, 2005b).

2. The QLP Model

The project was based the assumption that, in improving their performance, schools respond best to a combinations of demand pressures (accountability) and supply measures (support). Only government has the moral and legal authority to demand accountability of its employees: this is achieved through line management functions at the level of national and provincial Departments of Education, district offices, and schools. NGOs and donors may assist government efforts by providing supply-side measures, in the form of training and support, aligned to government goals. Furthermore, while supply-side measures on their own have been shown to have an effect on school performance, it is assumed that the effects of supply-push measures are greatly enhanced when combined with demand-pull measures.

Based on this argument, a systemic model of school improvement was followed, in which capacity was built at:

- District level in order to better monitor and support the work of schools
- School level in order to provide more effective leadership and to better monitor and support the work of teachers, and
- Classroom level to provide more effective teaching

One of the elements of the QLP model was to target schools which exhibited a minimum capacity for promoting effective teaching and learning, on the assumption that, in the absence of this capacity, schools would be unable to absorb the interventions and benefit from the project. Unfortunately, provinces invariably selected their least functional districts and schools for participation. While this

decision is understandable from the provincial point of view, it significantly undermined a key element of the project design.

3. Targets

The ultimate aim of the QLP was to improve student learning, and evaluation criteria were set against this goal at the start of the project. These required that by the end of the project QLP schools would show an improvement in school performance, against a comparable sample, of:

- A 10% improvement in mean overall matriculation pass rate;
- A 10% improvement in mean mathematics pass rate; and
- A 10% improvement in mean English Second Language pass rate.

It was soon realized, however, that while improvements in pass rates are important indicators of efficiency gains, on their own, they provide no measure of the quantity and quality of learning outcomes. In addition, they are open to manipulation¹. By the Mid-term Evaluation, therefore, it had been decided to extend the list of QLP indicators so as to target:

- An improvement in quantity, measured in terms of the increase in the absolute number of matric passes.
- An improvement in quality, measured in terms of the increase in the number of exemptions, SG maths passes and HG maths passes.
- An improvement in efficiency, as measured by the increase in pass rate.

Progress against this list of indicators was measured in the HSRC evaluation by comparing the performance of a sample of QLP schools against a comparable sample of non-project schools.

4. Activities

The training programmes delivered by service providers were directing toward improving:

- Teaching of mathematics, reading and writing skills in 524 schools. The QLP was underpinned by the understanding that mathematics and language are the foundations for all further learning and that educators at all grades in all learning areas should foster the development of better reading and writing skills. Training programmes in maths and English focused on improving the content knowledge of teachers in these subjects.

¹ For example, a school may enter 10 candidates one year, with 4 of these passing, and the next year enter 6 candidates, with 3 passing. While the pass rate will have improved from 40% to 50%, the actual number of passes will have declined by 25%. Indeed, there is strong evidence to indicate that the exclusive and intense focus on matric pass rates over the last five years has encouraged schools to prevent many candidates, who may have had a reasonable chance of passing, from sitting the exam.

- Governance and management in 524 schools, focusing on school development planning, financial management, curriculum leadership and the management of resources.
- Management of 17 district offices in the nine provinces, prioritising human resource and financial management, educational management information systems (EMIS), procurement and distribution of text books and stationery, curriculum development, and assessment to enable these district offices to support schools and to monitor their performance.

The HSRC evaluation reports that the effort, coherence and management of interventions was comprehensive, and at a scale not witnessed in South Africa before. The data collected during the evaluation further indicates that interventions were targeted dynamically and interactively at the parts of the system where they were needed most. This finding suggests the appropriate and responsive management and implementation of the intervention programmes by service providers.

5. Results

5.1 Matric results

It is clear from the targets listed above that performance in the matric exam is the main touchstone for assessing the impact of the QLP. This was measured by calculating the improvement in results exhibited by a sample of QLP schools, and comparing these results against those achieved by an equivalent sample of non-project schools. The results are shown in Table 1 where the consistently higher improvement of QLP schools compared to control schools in terms of the quantitative, qualitative and efficiency dimensions of the matriculation results is clearly evident.

Table 1: Comparison of improvements in matric results across sample QLP and control schools, 2000-2004 (HSRC, 2005b)

	Increase 2000-2004											
	Passes		Exemptions		English HG		Maths HG		Maths SG		Pass rate	
	No	%	No	%	No	%	No	%	No	%	% pts	%
QLP > C*	224	16.84	133	61.79	628	36.03	65	924.19	4	0.70	1.53	8.20

* These figures were computed by subtracting the improvements achieved by control schools (C) over the life of the project from those exhibited by QLP schools. The % columns show differences in percentage points.

Thus, QLP schools increased the number of matric passes by over 16% more than the increases achieved in non-QLP schools, the number of exemptions by over 61%, the number of English HG passes by 36%, the number of HG passes in mathematics by 924% and the pass rate by over 8% more than non-project schools. The evaluation concluded that these results were attributable to the project interventions. According to the external evaluation conducted by the HSRC, therefore, the QLP was an unqualified success.

5.2 Learner performance at Grades 9 and 11

The HSRC also measured pupil performance in mathematics and language at Grade 9 and 11 levels during each of the three evaluation stages. Very low levels of performance at both grade levels were noted on these tests, which were constructed to assess knowledge specified by the curriculum. No significant improvements were found during the life of the project, except for Grade 11 writing skills, where QLP schools showed significant improvements not equaled by control schools. In view of the rather spectacular improvements at the matric level shown in Table 1, this is a puzzling finding and we shall return to it in section 8.1 below.

5.3 Classroom level

The evaluation tracked a great number of indicators at the classroom level, observing hundreds of Grade 9 and 11 mathematics and language lessons. The clearest pattern to emerge in all three evaluation reports from this mass of data is that schools give more attention to Grade 11 classes than to Grade 9, and to mathematics than to language. This is particularly evident in the provision of learning resources, the quality of curriculum planning, and coverage of the curriculum. These patterns are explicable in terms of the public focus on matric results in general and on performance in mathematics in particular, and the consequent pressure on schools to begin to prepare pupils in their penultimate and final school years to meet these demands.

Nevertheless, a second overall pattern to emerge was the steady improvement in teaching practices in both subjects and at both Grade 9 and 11 levels over the life of the project.

Schools in 13 of the 17 QLP districts were found to be better off in terms of physical resources such as chairs, tables, desks and classroom space in 2004, compared to 2002. The exceptions were Flagstaff and Libode in the Eastern Cape, Sedibeng West in Gauteng, and Zebediela in Limpopo. The provision of these resources was not a function of the QLP and reflects government's steady progress in addressing backlogs in resourcing schools. However, given the key role played by teaching and learning resources, such as textbooks and calculators, in promoting learning, the evaluation finding that these materials are in moderate to poor supply across schools in all QLP districts is of particular concern.

5.4 School level

The QLP model assumes that effective school management is of critical importance, as it provides the enabling environment for good teaching and learning. The evaluation found firm evidence to indicate that QLP schools improved more than control schools on overall school functioning, which includes aspects such as school development planning, the existence and use of physical resources, facilities, and books and stationery, curriculum leadership, financial management and school administration. Not only were the index values for school management in the moderate to high range for QLP schools, but they also showed a definite

improvement. For control schools, scores remained constant at moderate levels. The evaluation found it reasonable to ascribe many of the observed improvements to the existence of the QLP.

An increase in the monitoring and support of curriculum delivery in schools was evident, although the level of curriculum leadership in most of the schools was still rated as low to moderate indicating that a great deal of improvement is required in this area. This includes mentoring of teachers and other forms of staff development, quality assuring the planning, coverage and assessment of curriculum delivery, monitoring results and keeping records. The existence of learning programmes and syllabi and the monitoring of assessment practices were rated particularly low for all schools.

5.5 District level

The QLP model posited that districts drive the improvement of learner performance, mainly through school support and monitoring. The evaluation recorded that 13 of the 17 QLP districts were restructured during the life of the project, and that some of these experienced repeated restructuring events, one of them up to 5 times. As a result, there is continued instability in many district offices and a lack of clarity in provincial/district lines of responsibility and authority. Thus, the levels at which most districts function are very low, with financial management the single greatest concern.

The evaluation concluded that the present time is not propitious for the success of any district-based school-development model in South Africa as a result of this situation.

However, there does appear to be some light at the end of this tunnel. While the QLP interventions seemed to have served as an additional burden on many district offices, in a few they seem to have been a very positive influence in assisting districts to operationalise their new structures and mandates or to improve their already stable functionality. How individual districts responded to the QLP intervention depended on specific conditions. Furthermore, although performance in non-restructured districts was almost always at a higher level, the evaluation found a noteworthy improvement over the life of the project in terms of a number of indices of district functionality in a number of districts. Aspects of district functioning that improved very well (by more than 10%) are the existence and use of job descriptions, financial management, within-district planning, school-support planning, and school-support implementation. The evaluation concluded that these increases can be attributed at least in part to the QLP interventions.

6. Modelling exercise

The final component of the HSRC evaluation study involved the application of a statistical modelling exercise designed to reveal the causal relationships between the various QLP interventions, changes in district, school and classroom practices, and learning outcomes.

The strongest set of relationships identified by this process arise from the language across the curriculum intervention, which ultimately elevated the overall matriculation pass rates of QLP schools beyond those of their control-school counterparts. Strong links were evident between teacher interventions, teacher and school functionality, and pass-rates.

The pattern of trends and relations regarding SG mathematics pass rates in matric was visibly leaner, suggesting that this is a particular area of concern and difficulty, both in terms of achieving success and in attracting and retaining strong and successful learners. Modelling at the level of HG mathematics was not an option, because of the low numbers and poor performance levels of learners.

Improved system functioning predicted improved learner performance in many instances; this especially applied in the cases of school and teacher functioning. An especially salient pattern is that of good classroom and teacher interventions being associated with improved school functionality. District interventions were also often strongly associated with improved district and school functionality and sometimes also classroom practices.

Finally, the modelling exercise indicated that there has been consistency over years with regard to interventions, system functioning and learner performance across system levels, subjects and grades, indicating the sustainability of critical mass and impetus, once achieved. Many indications point to the fact that service providers targeted interventions dynamically and interactively at the parts of the system most in need of them.

7. Costs

The total cost of the programme was R139 million. This gives a mean per school cost of R265 000 over the life of the project, or R53 000 per school per year.

8. Lessons Learned

8.1 The systemic model of school development

Many school development programmes in South Africa focus primarily on developing teacher capacity, working with principals and district officials only incidentally and where necessary to obtain approval for the project. Such initiatives are based on the assumption that it is the function of school principals and departmental officials to provide an environment conducive to teaching and learning, beyond which teachers should be left alone to get on with the job with minimal interference from outside the classroom. In contrast to this logic, most larger initiatives now adopt one or other form of the systemic approach, arguing that schools and teachers respond best when support is accompanied by accountability demands, and that capacity therefore needs to be built at district, school and classroom levels so as to strengthen systems for both monitoring and supporting learning. Current examples include the Integrated Education Project, working in over 700 primary schools in four provinces, and the

Khanyisa Education Support Programme, which is targeting 1000 primary schools in Limpopo. The Quality Learning Project was the first systemic programme to be targeted at high schools and the only one to date to be subjected to a rigorous evaluation.

The first lesson to arise from the evaluation is that there is much promise in the systemic approach. Evidence from the QLP indicates that strengthening school management capacity leads to improved teaching and learning and that, under certain conditions, strengthening district systems leads to more effective school management. This may seem obvious – and indeed, it is the logic on which the entire system of public schooling is founded – but what has not been clear is which management systems are the key levers to learning. Apart from basic district and school functionality and administration, and in particular the management of books and other teaching materials, what emerges as a key lever to improved learning is curriculum leadership, which includes district and school level planning and monitoring of both curriculum coverage and assessment. These practices on the part of district and school managers are associated with effective delivery of the curriculum in classrooms.

However, it is also clear from practices in QLP schools and districts that three factors inhibit the full realization of the systemic model: lack of clarity about the role of the district, a crisis of confidence in asserting legitimate educational authority throughout the system, and a shortage of key resources. We discuss these issues below.

8.2 District roles and resources

The majority of the 17 QLP districts are unsure about their role, and there is much to indicate that this is the case in the overwhelming majority of school districts in the country. Where there is an indication from the province concerning their role, they are likely not to have been formally assigned the authority required to fulfill this function. And in all cases, whether the district has experienced restructuring recently or not, it is very unlikely to have the resources required to interact effectively with schools. In shortest supply are personnel, with many vacant posts, often the majority of the establishment.

In the last year or so the national Department of Education has made considerable progress in defining the role of the school districts, establishing a set of norms for resourcing districts and completing the first draft of an operations manual for districts. There is still a great distance between these national policies and their operationalisation in most provinces, a number of whose provincial offices are themselves highly dysfunctional. However, this situation should not discourage school development programmes from adopting the systemic approach: the QLP has demonstrated that working at the district level can be effective even under the most difficult circumstances, and there is every indication that the situation will improve in the future. This is likely to be long, slow haul, but providing additional capacity and resources at the district level can only speed up the process.

8.3 Accountability and authority

The second major inhibition to the full implementation of systemic school reform in South Africa is the inability to set and monitor accountability standards at all levels of the system. Apart from the intense interest around the results of the annual matric exam, principals and School Governing Bodies, by and large, do not monitor the performance of learners, while district and provincial offices do not monitor the performance of schools. The point is emphasized by another finding of the QLP evaluation study: no gains were discernible in mathematics at grade 9 or 11 levels. The most likely explanation for this result, in the light of the very impressive improvements at matric level, is that, whereas intense pressure is put on schools to perform in the matric exam, no monitoring is applied at lower levels of the system.

This situation is partly a legacy of apartheid, where the bureaucracy was seen to be an organ of oppression, and partly a legacy of the progressive movement in education, which holds teacher autonomy sacrosanct; it is further entrenched by the growth of strong teacher unions and the continued weakness of the bureaucracy in all provinces; and it is exacerbated by relations of patronage which have taken hold in significant portions of many provinces, where the employment of people with technical skills is not a high priority. This weakness is exemplified by the inability of most provinces to set up an effective EMIS system, a fact which renders the systematic collection of data, the foundation of any monitoring system, impossible.

In this area, too, progress is being made, with government and the unions having reached agreement on the shape of an Integrated Quality Management System. However, despite announcements from government that the IQMS was to be implemented in each of the last two years, there is little sign of movement on this issue in most provinces.

8.4 Language

There is an increasing weight of evidence that, after poverty, language, and in particular, proficiency in the medium of instruction is the largest single factor affecting learner performance at school. The issue of language therefore looms large in South African schooling, given that the majority of children study in a second language. English Second Language is the subject with the largest number of registrations, attracting 80,7% of all candidates in 2003. These students are not only communicating in class in a second language, but also using it as the vehicle for learning all their other subjects. It is therefore of great importance that it is taught and learned effectively. The conceptual skills learned in the language of instruction serve as tools for learning all other subjects.

Under these circumstances it is not surprising that the strongest impact of the QLP training programmes on learning was achieved in the area of language, where a language across the curriculum approach was adopted. Not only did the programme result in greatly enhanced learning gains in the matric English results compared with control schools, but language was the only area which showed any learning gains at the Grade 11 level. The latter finding supports the view that, as the vehicle for

learning in other subjects, learning gains in the medium of instruction are not only likely to appear before they do in any other learning area, but are in fact a prerequisite for improving learning in other subject areas such as mathematics.

If this view is correct it has at least two far-reaching implications. The first is that learning gains realized by all school development programmes, whatever their specific focus, will be optimized if a language component is included. And second, the very low standard of English Second Language in the current curriculum is severely handicapping the majority of South African pupils. In a research project conducted in 2004, Umalusi, the body which quality assures and certifies the matric exam, noted that the 2003 national ESL paper consisted almost entirely of questions of the search-and-find variety, requiring little engagement of a deeper nature (Yeld et al, 2004). Thus, the project concluded, pupils were being ill prepared for the kinds of conceptual tasks required by anything more than a superficial study of their other subjects. Given the profound effect the matric exam has in establishing the level of teaching in schools, it would seem that the first and most imperative step towards increasing the success of African children in all subjects is to increase the level of cognitive demand of the ESL curriculum.

8.5 Differentiation

Whereas Table 1 compares matric results for the sample of QLP schools used in the HSRC evaluation with those of a set of comparable control schools, Table 2 compares results for the full set of QLP schools with those of the national mean.

Table 2: Comparison of QLP matriculation results with the national mean, 2000-2004

	Increase 2000 – 2004								
	Passes		Exemptions		HG maths		SG maths		% Pass
	No	%	No	%	No	%	No	%	
Total QLP	4167	18.3	1182	34.8	585	152.3	8741	137.5	14.0
Total SA	47314	16.7	16493	24.0	8466	47.0	46512	58.0	12.8
Difference		1.6		10.8		105.0		79.0	1.2

The figures show, for example, that the 513 QLP schools for which data is available produced 585 more HG maths passes in 2004, resulting in a total of 969, which was up from only 384 achieved in 2000.

The impressive learning gains shown by QLP schools in Tables 1 and 2 are subject to two important qualifications. First, they were made off an extremely low base, a feature brought out by Figure 1, which shows the frequency distribution of HG maths passes by school in 2000. 431 schools, or fully 84%, did not produce a single HG maths pass in the year the project started, while only 14 schools (2,8%) obtained 6 or more such passes. These figures starkly illustrate the extent to which the poorest performing schools were allocated to the project across all provinces.

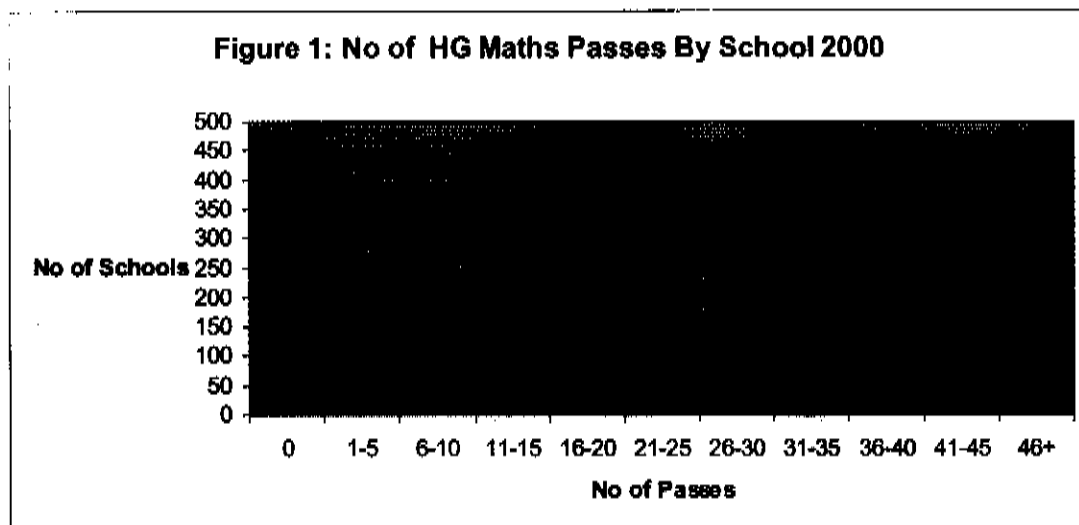
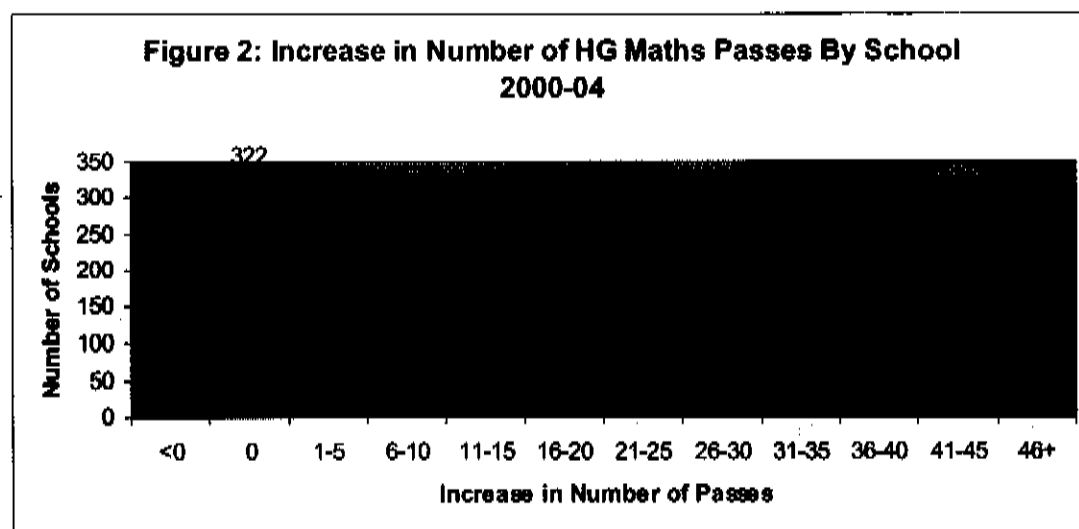


Figure 2 shows the distribution of the gains in the number HG maths passes, by school, over the life of the QLP.



These figures illustrate the second point to note about the learning gains made by QLP schools: the improvements were achieved by 159, or only 31% of the schools. Fully 354, or 69%, gained nothing, in terms of improving their HG maths passes, from the considerable resources expended on them over a period of 5 years.

This conclusion points to an important element of our knowledge about schools which has been recorded in South Africa (Christie and Potterton, 1997) but which has not been taken into account in the implementation of school development programmes. This refers to the three-part classification of schools devised by Hopkins et al (Hopkins, Harris and Jackson, 1997). According to this scheme those QLP schools which showed no benefit from the programme would be classified as requiring what these authors described as Type I intervention strategies. Rewards and sanctions have no effect in these situations, as the schools are unable to help themselves. These schools require a high level of external intervention and support. There should be a

clear and concerted focus on a specific, limited number of factors. In many schools in this state the first thing to be done is to remove the principal; often strong mediation is required to break situations of conflict between various groups in the school. Only government has the authority to intervene here. But, as we have seen, provincial and district officers, by and large, are incapable of doing this in South Africa at the present time, certainly on the kind of scale required to turn around the relatively large numbers of failing schools in all provinces.

One of the most important lessons of the QLP is that programmes of this kind are only successful in schools which have a minimum level of capacity at the start (Hopkins et al's Type II schools). This is a lesson that government has itself learned from the Dinaledi project, which was in many ways similar to the QLP² and which also had little success in a significant number of target schools: thus, the second phase of Dinaledi is being targeted at Type II schools. Had the original intentions of the QLP been implemented – ie of working only in Type II schools – then the results would certainly have been far more impressive and have been achieved at a fraction of the cost.

8.6 Evaluation

A final lesson of the QLP is that it is only through longitudinal evaluations, which use objective measures of pupil performance and which include adequate controls in their designs, that it is possible to disentangle the complex causal relationships between project interventions, intervening variables and learning outcomes. Such studies are relatively expensive and need to be initiated during the planning stages of the project.

8. Conclusion

One of the strongest points to emerge from the Quality Learning Project is that, in order to use resources efficiently, a differentiated approach to school improvement is necessary. A method needs to be developed which distinguishes dysfunctional schools (Type I), which require an authoritative, government-led approach, from those which have the capacity to benefit from lighter interventions (Type II).

Second, a combination of accountability measures and supply-side support is important in leveraging improved learning. While this is true in all schools, a different mix of pressure and support is required in the two school types. For both types of schools, the most important accountability measures are setting standards in the form of academic expectations, monitoring pupil performance, planning and monitoring curriculum coverage, and quality assuring assessment. These are the key management tasks, collectively known as curriculum leadership. For Type I schools, deep-seated structural issues require resolution before curriculum leadership can take hold.

² The Dinaledi project, implemented in 102 schools nationally, achieved similar results to those shown in Table 2. However, one important difference between the two programmes is that, although Dinaledi was also targeted at very poor schools, it started from a significantly higher base than did the QLP. Thus, the frequency distribution of HG matric maths passes at the start of Dinaledi was skewed to the right when compared with the QLP distribution shown in Figure 1.

Finally, the most important support measures include training of managers to implement accountability measures, and training teachers in subject knowledge. In regard to the latter, building teacher capacity to promote proficiency in reading and writing in the medium of instruction is far and away the single most important intervention at the classroom level. All indications are that, until the issue of language is addressed, success in improving learning outcomes for poor South Africans will, at best, remain at modest levels.

Acknowledgement

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References

Christie, P and Potterton, M (1997). **Final report: school development in South Africa – a research report to investigate strategic interventions for quality improvement in South African schools**. Johannesburg: University of the Witwatersrand Education Department.

Hopkins, D, Harris, A and Jackson, D (1997). Understanding the school's capacity for development: growth states and strategies. **School Leadership and Management**, 17(3),401-411.

HSRC (2001) **The Quality Learning Project: Baseline Study**. Pretoria: Human Sciences Research Council.

HSRC (2003) **The Quality Learning Project: Mid-term Evaluation**. Pretoria: Human Sciences Research Council.

HSRC (2005a) **The Quality Learning Project: Final Summative Evaluation**. Pretoria: Human Sciences Research Council.

HSRC (2005b) **Improving Learning in South African Schools: Executive Summative Report to the Business Trust on the Quality Learning Project (QLP)**. Pretoria: Human Sciences Research Council.

Yeld, N; Grobler, M and Sekwane, C (2004) **Investigation into the Examination of English Second/Additional Language of Selected Examination Authorities in the Years 1992, 1999, 2001 and 2003**. Pretoria: Umalusi.