Towards Quality Education in General Education and Training

Policy Brief 1, 2006

What the Grade 6 Systemic Evaluation tells us

Checking on learning quality

Ten years after the dawn of democracy in South Africa a new survey of grade 6 learning confirms that despite the many policies and programmes designed to improve the quality of education particularly for the poor, the legacy of decades of neglect and discrimination has not been overcome.

Although the schools are now part of a non-racial system with new curricula and learning materials, the evidence shows that more than half our children are not achieving the expected learning outcomes in Natural Sciences, six out of ten are not achieving in the language of learning and eight out of ten are not achieving in Mathematics. ("Achieving" means scoring 50 per cent or better in a grade 6 assessment task.)

These are the distressing findings of a massive survey of almost 34,000 grade 6 learners in a representative sample of 1,000 mainstream public schools across the country. The survey conducted in late 2004, is the latest in a series of "systemic evaluations" or national assessments of learning achievement that the Department of Education undertakes to gauge the state of learning in our schools. The survey also collected information on conditions that affect learning, in the schools and in learners' homes and communities.

Poor learning conditions and poor learning achievement have held back progress for the majority of South Africans for decades. Since 1994 the democratic government has made radical changes in the school system in order to overcome these historic deficits. The Ministry of Education has committed itself whole-heartedly to this project, declaring quality education for all to be its goal. The survey of grade 6 learning tells us how far we still have to go and gives us important clues about where we should be putting in greater effort.

The survey gives us an accurate reflection of the condition of schooling in the intermediate phase (grades 4–6) in South Africa. Although it was not designed to tell us how specific factors cause children to learn better or worse, the survey does show what factors on their own and in combination are significantly associated with better or worse learner scores.

The results have been analysed so that the government and the public can be informed about the factors that have the strongest bearing on how well learners learn, and so that education authorities, school governing bodies, school management teams, teachers and parents can understand better how to put right what is wrong with our schools so that all learners can get a basic education of real value.

A child's ability to learn well is influenced by many factors at home, in the community and at school. Poor learning in school is often associated with difficult home conditions, because parents
are very poor or the social environment is hostile. Schools and education authorities can't change such factors but the survey results do suggest to us how school-related factors can and should be changed so that learners can get a better opportunity.

Important out-of-school factors affecting learner performance

Girls and boys scored about the same in all three assessment tasks, but learners' performance showed great variation in other respects. It is painfully clear, judging by the grade 6 learners' scores, that the chances of learning successfully are very unequally spread across the country. On some assessment tasks learners scored half as well on average in some provinces than in others. Families are very poor and schools are still poorly resourced in provinces that inherited large rural homelands, and their learners fared worse by far. Learners scored best in town schools and (in descending order) less well in township, farm schools, rural and remote rural schools. In fact in some assessment tasks remote rural learners scored almost three times worse than urban learners.

Learners' home circumstances seem to have strongly influenced their performance in all three learning areas. In fact the social and economic conditions at home have the strongest correlation with how well children learn. On average children from very poor families scored a third as well in Language and Mathematics and half as well in Science as did children from very well off families.

Poor households are unable to afford books, radios and television, and children who have access to these media of information and stimulation at home generally performed better on their assessment tasks. A relatively large proportion of parents in the sample reported that their children stayed home from time to time when they were unable to pay school fees, and such children scored significantly lower on the three assessment tasks. By contrast, learners whose parents or guardians were able to pay school fees performed better.

These parents or guardians were themselves educated, took an interest in their children's school work and participated in school activities.

Important in-school factors affecting learner performance

"Learner participation" was the in-school factor most strongly associated with better performance in Language, Mathematics and Science. Participation refers to what goes on in classrooms. Learners' scores are higher when they interact frequently with their teachers, work together and use educational materials.

Since participation requires communication and communication requires language, it is not surprising that the most influential aspect of learner participation was the language in which learners were taught and learnt. Grade 6 children performed better in all three learning areas when they learnt in the home language, whereas children who had learnt in a language other than their own tended to score less well. There is ample evidence from other research that children who learn in their own mother tongue in the early years of schooling become more competent in the foundation skills of reading, writing and number work, but the authors of the grade 6 systemic evaluation report caution that other factors may also be influential, since learners who were not learning in their mother tongue and who scored low in the assessments also tended to live in rural and remote rural areas.

The overall evidence is clear that the richer the learning environment in schools the better children perform in their assessment tasks. Teachers clearly need adequate resources to aid them and where these were absent their learners fared poorly. Where schools had a library or book collection, an Internet connection or a teaching resources centre their learners tended to score significantly higher. Of course such resources may assist children's learning only if they are
properly used, but they cannot be used if they are not present. The same is true for equipment like overhead projectors, or even a school telephone and a staff office. The authors of the report say that the availability of such school resources is "a crucial dimension of school effectiveness". They regard it as a "threshold" factor that enables effective learning and teaching to develop and flourish. Large numbers of rural schools are without the basic amenities of fresh water on site, toilets, electricity and a telephone line, and they struggle to provide their teachers and learners with informative and stimulating materials to aid their work. In such schools the learners struggled to perform well.

Of all the in-school factors studied in the survey, these three – learner participation, school resources and teaching resources – were most strongly associated with learner achievement. A few other factors had a somewhat less strong correlation but are no doubt essential for creating a purposeful learning environment. These are school safety, the provision of information at school, school discipline and regular attendance.

Changing the conditions affecting successful learning

Education systems are complex. Schools are embedded in communities that are highly diverse. Provincial systems of provision have sharply different political legacies and social and language characteristics.

Making wide-scale changes that will help teachers to teach better and learners to learn more effectively is a difficult undertaking that needs patience, persistence, strong co-operation among all who are involved, well-targeted resources to compensate for past neglect and present poverty, and well-researched, reliable information.

The systemic evaluation studies point the way to actions that need to be taken or sustained and accelerated so that all children in South Africa are able to enjoy their right to a high quality basic education.

Alleviating or eliminating poverty, alleviating the burden of disease and providing infrastructural services to communities will decisively tip the balance in favour of equitable education provision but such changes are well beyond the scope of education authorities at any level. Within the education system, from national to school level, the survey evidence points to many changes that together can raise the quality of children's learning. The education departments may not yet have targeted some but many are already part of the departments' strategies for school improvement, supported by teachers' organisations. The Ministry of Education is determined to raise school quality by tackling the issues that prevent schools from promoting effective learning. This report provides important reinforcement for many of these initiatives.

The Departments of Education have embarked on a comprehensive strategy aimed at achieving access, quality, equity and efficiency in our schools. This is known as AQEE model and it helps to relate important in-school factors affecting learning to these vital goals of our education policy.

Conclusion

The survey provides evidence of what must still be done to provide education of acceptable quality to the poorest of our learners and raise the quality of learning in every classroom in the country. But the survey's evidence indicates that interventions such as those within in the AQEE strategy will go a long way towards addressing the challenge.

Source

Learner Achievement Scores

**Figure 1: Average National Scores by Learning Area**

<table>
<thead>
<tr>
<th>Language</th>
<th>Mathematics</th>
<th>N/Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38</td>
<td>41</td>
</tr>
</tbody>
</table>

**Figure 2: National Scores by Gender**

<table>
<thead>
<tr>
<th>Language</th>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>41</td>
<td>35</td>
</tr>
<tr>
<td>Mathematics</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>N/Sciences</td>
<td>42</td>
<td>40</td>
</tr>
</tbody>
</table>

**Figure 3: Average National Scores by Language of Learning and Teaching (LOLT)**

<table>
<thead>
<tr>
<th>Language Taught in mother tongue</th>
<th>Not taught in mother tongue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>69</td>
</tr>
<tr>
<td>Mathematics</td>
<td>48</td>
</tr>
<tr>
<td>N/Sciences</td>
<td>60</td>
</tr>
</tbody>
</table>

**Figure 4: Average National Scores by Location**

<table>
<thead>
<tr>
<th>Language</th>
<th>Urban</th>
<th>T/Ship</th>
<th>Rural</th>
<th>R/Rural</th>
<th>Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>64</td>
<td>40</td>
<td>29</td>
<td>23</td>
<td>34</td>
</tr>
<tr>
<td>Mathematics</td>
<td>46</td>
<td>26</td>
<td>22</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>N/Sciences</td>
<td>58</td>
<td>42</td>
<td>35</td>
<td>30</td>
<td>37</td>
</tr>
</tbody>
</table>

This Policy Brief is issued by the Department of Education

Department of Education, Sol Plaatje House, 123 Schoeman Street, Pretoria, South Africa, 0002

Private Bag X895, Pretoria, 0001, Tel.: +27 12 312 5911, Fax: +27 12 321 6770, Website: www.education.gov.za

Design and layout:
Formeset Digital Tshwane, Tel.: (012) 324 0607