

Raising standards: A shared challenge

Geoff Masters outlines his recommendations to improve literacy, numeracy and science learning in Queensland primary schools.



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Following the release of results for the 2008 National Assessment Program – Literacy and Numeracy (NAPLAN) and the 2007 Trends in International Mathematics and Science Study (TIMSS), the Queensland Premier, Anna Bligh, asked ACER to undertake an independent review of literacy, numeracy and science standards in Queensland primary schools.

The report of my review, *A Shared Challenge: Improving Literacy, Numeracy and Science Learning in Queensland Primary Schools*, made five recommendations which were endorsed by the Queensland Government on 30 June.

My review included an analysis of the test performances of Queensland students, consultations with a range of stakeholders and visits to a number of selected primary schools. A general conclusion of the review was that improved outcomes in primary literacy, numeracy and science are likely to be facilitated by providing schools with:

- *access to a workforce that is very well prepared through pre-service teacher education programs*

The quality of literacy, numeracy and science learning in primary schools depends in part on how well teachers are prepared through pre-service teacher education programs to teach these subjects.

Beginning teachers should be familiar with, and be beginning to develop, a repertoire of evidence-based teaching strategies (e.g., for the teaching of reading). They also require sound levels of literacy, numeracy and science knowledge themselves, strong interpersonal and communication skills, a willingness to learn and a strong motivation to teach.

- *access to high quality professional learning for teachers*

Opportunities for professional learning need to be available in a range of areas relevant to the work of schools. If primary schools are to lift achievement levels in literacy, numeracy and science, then they require access to high quality professional development focused on the teaching of these subjects. Professional development must be firmly grounded in evidence-based research and practice, and be designed to build teachers' levels of expertise, including their own content knowledge and their knowledge of effective ways to teach these subjects.

- *access to ongoing expert advice and support for the teaching of literacy, numeracy and science*

Within education systems, this support sometimes is provided by



Photo by Vonne Cavill

specialist staff working from district offices. Schools of sufficient size also sometimes have specialist literacy, numeracy and science teachers on staff. The roles of these 'specialist' teachers include coaching other teachers, team teaching and the provision of curriculum leadership and advice on teaching methods and resources within their areas of specialisation. Ensuring that all schools have access to specialist advice and support in the teaching of literacy, numeracy and science is likely to be a key to raising achievement levels across a system.

- *clarity about what teachers are expected to teach and students are expected to learn by particular stages of schooling and support in monitoring the extent to which this is occurring*

Classroom curriculum and assessment resources aligned with teaching and learning expectations assist teachers in developing teaching programs and monitoring student achievement and progress. NAPLAN makes explicit the levels of reading, writing, spelling, grammar and punctuation and numeracy that all students are expected to reach as a minimum by Years 3, 5, 7 and 9 and provides schools with a basis for monitoring individual

growth across these years of school, identifying areas in which the school is performing well or poorly and monitoring trends in school performance over time. No such classroom resource is available in science.

- *access to high quality professional learning and support for school leaders*

School leaders are likely to benefit from increased opportunities to share experiences and to learn from best practice in driving school improvement, including in the areas of setting targets and high expectations, analysing and monitoring school performances, building staff capacity and effectively allocating physical and human resources to improve learning. Most principals also would benefit from additional support (e.g. with school administration tasks) to enable them to spend more time leading teaching and learning.

These conclusions were the basis for five recommendations:

1. That all aspiring primary teachers be required to demonstrate through test performances, as a condition of registration, that they meet threshold levels of knowledge about the teaching of literacy, numeracy and

science and have sound levels of content knowledge in these areas.

2. That the Queensland Government introduces a new structure and program of advanced professional learning in literacy, numeracy and science for primary school teachers.
3. That additional funding be made available for the advanced training and employment of a number of 'specialist' literacy, numeracy and science teachers to work in schools (and/or district offices) most in need of support.
4. That standard science tests be introduced at Years 4, 6, 8 and 10 for school use in identifying students who are not meeting year-level expectations and for monitoring student progress over time.
5. That the Queensland Government initiates an expert review of international best practice in school leadership development with a view to introducing a new structure and program of advanced professional learning for primary school leaders focused on effective strategies for driving improved school performances in literacy, numeracy and science.

The full report is available at <<http://education.qld.gov.au/mastersreview>> ■