Summary of the New Basics Research Findings

Note

This document is a very brief summary of the New Basics research findings. It is written for a general audience. By virtue of its note-taking form, it is quite terse. This is necessary because the information from which it is derived is diverse in nature, rich in specific detail, and steeped in contextual explanation.

References

*The New Basics Research Report (*2004, June)
Brisbane: Department of Education and the Arts

Evaluation Report of the New Basics Research Program (2004, July)
Melbourne: Australian Council for Educational Research

Website: http://education.qld.gov.au/corporate/newbasics/

Background

- The research program was designed to be illuminative and to put the New Basics[1] to the hard test[2].
- The trial school population (4% of students; 3% of schools) was negatively skewed[3].
- The research program used a mixed methods approach—from case study to multilevel modelling, critical discourse analysis to psychometrics.
- Some of the research studies were absolute: They asked what was happening in trial schools. Some were longitudinal: They measured if and how trial schools changed over time. Many of the studies were comparative: They asked whether there was a difference between what was happening in trial schools and what was happening in non-trial schools.
- For certain comparative studies, matched or "like" schools were selected; for other comparative studies, schools were selected because they were known to be outstanding ("the best").
- The trial/non-trial comparisons used in judging the consequences of "doing New Basics" underestimate the size of differences between trial and non-trial populations because of cross-contamination effects[4].

1 "New Basics", "Productive Pedagogies" and "Rich Task" are registered trademarks being the intellectual property of the State of Queensland (Department of Education and the Arts).
2 For example, some of the research activities were deliberately and rigorously designed to test whether and where the New Basics had failed in any respect.
3 Trial schools are higher than non-trial schools on measures of social disadvantage (i.e. they are less advantaged). Trial schools are lower than non-trial schools on measures of literacy and numeracy.
4 Some teachers in a few New Basics schools were actually not doing New Basics, and some non-New Basics schools had adopted certain aspects of New Basics such as Productive Pedagogies.

Overall comments

- Real, large changes in teaching practices and student outcomes were observed over the course of the Trial—large numbers of teachers shifted the nature of their students' work towards high-level, intellectually engaging tasks.

- According to the literature on school reform, the time lag for achievement of change is three years in a primary school and, depending on size, six years in a secondary school. The data for the New Basics research were collected over a 3-year span, but in fact almost all the reported changes were achieved in one year—the juncture year—when the muscular demands of Rich Task assessment with attendant moderation came into play.

- Taken one by one, the observed changes are not earth shattering, but all line up in the same (desirable) direction. Taken together, they signal a profound and fundamental change in schooling.

- This type of change, which is notoriously difficult to achieve in anything more than isolated instances, was replicated in many schools in the Trial.

Strengths and weaknesses of the New Basics

⇧ Quality of student work

⇧ Development of an assessment system

⇧ Changes in approaches to teaching

⇔ Performance on standardised tests

⇩ Congruence with other aspects of the school system and its context

⇩ Differential impact between year levels

Source: Independent external evaluator's report

New Basics assessment system (including moderation)

- Is a cost-effective way of producing the desired changes.
- Strongly influences teacher behaviour.
- Promotes teacher conversations about pedagogy and standards that lead to change and cross-fertilisation of ideas.
- Has a positive impact on curriculum and pedagogy.
- Produces valid assessment instruments.
- Delivers useful assessment data for reporting.
- Leads to a reasonable degree of comparability in grades awarded and reported on.
- Presents a significant but not insuperable challenge for teachers as they use the Rich Task assessment model[5].
- Includes a ratification[6] process that affects final student results at all junctures, markedly more so in Year 9 than in Years 3 or 6, and predominantly through a downward shift in grades awarded.
- Is able to withstand pressure and respond to challenges arising during the quest for comparable standards.
- Possesses all five elements[7] of an effective assessment system, one of them (curriculum planning) less strongly than the other four.
- Through the moderation strategy delivers high-level professional development for teachers, not only in assessment but also in discipline-specific knowledge.

Rich Tasks

- Are sufficiently diverse and multifaceted to make up a coherent and balanced set.
- Are more than a measure of literacy and numeracy; they are truly multidimensional.
- Are not interchangeable (one task within a suite cannot be substituted by another).
- Are not just another project (but were sometimes conducted as such in some schools).
- Force the use of technology where this has not been the pattern.
- Provide richness (the proxy for rigour) that indicates decisively improved student outcomes.
- Function effectively as an assessment device.
- Provide richer information about student achievement than do conventional devices.

Rich Task as outcome

- Teachers were surprised that that some of their students performed so well.
- High expectations lead to much improved outcomes for many students.
- Excellence was rare but achievable: the median proportion of students receiving an A-grade was 3%.

---

[5] Teacher-assessors use grading masters, a variant of the criteria/standards matrix, a new tool to help them make assessment decisions that require on-balance judgments.

[6] The fourth and final stage of moderation, the confirmation by the system of a particular school's ability to make decisions about grades that are consistent with statewide standards.

[7] Curriculum intent, curriculum plan/work program, evidence of learning, assessment standards, validation of assessments.

- Commendable work was common: the median proportion of students receiving a *C*-grade was 45%.
- Factors that strongly influence success were identified—technology, performance, non-traditional learning frames, individual discourse in formal registers, project management of group endeavours.

Student work

- Is as rich as the best work from the best non-trial schools in Year 3.
- Is richer than the best work from the best non-trial schools in Year 6, particularly in problem solving, decision-making and action.
- Is as rich as the best work from the best non-trial schools in Year 9.
- Showed unacceptably low levels of intellectual quality in everyday work in non-juncture years (this was also true of non-trial schools).
- Improvement in student work was most evident in the juncture years.
- Displays skills for new times (e.g. ICTs, biotechnology, international trading, critical literacy).
- Is seen by non-state school teachers to be substance—not mere show.

Students

- Levels of satisfaction for *quality curriculum*, *improved learning*, *effective teaching*, *confidence in public education*, *technology adoption*, and *learning environment* were higher for primary students in trial schools compared with those in non-trial schools at the end of the Trial.
- Level of satisfaction with *quality curriculum* and *improved learning* increased over time for primary students in trial schools relative to those in non-trial schools.
- Students were exposed to generic skills development.
- Students were less likely to have had the opportunity to complete those tasks that present the greater challenge to existing curriculum and teaching practices.
- A not-insignificant proportion of students met the ambitious aspirational standards set for award of *A*-grade.
- Two outstanding Year 9 students (one male, one female) were awarded an *A*-grade for six out of the eight Rich Tasks. Both students were awarded a *C/B* for the Personal Career Development Plan.
- Student results displayed increasingly apparent gender differences in achievement as year level increased, with females dominating the *A*-grade, and a stronger male presence in the *C* and *U* categories.
- Students showed significant levels of transience: Only 83% of students in the juncture years (Years 3, 6 and 9) were in the same school in the previous year.

External testing

- No general decline in literacy and numeracy scores over the course of the Trial compared to the rest of state schools.
- Significant improvement in International Schools' Assessment (ISA) scores over two sittings (this was also true of non-trial students).

- Improvement at all levels in all domains of ISA (Reading Literacy, Mathematical Literacy and Writing), markedly more so for students in Years 3 and 6 than in Year 9.
- Significantly larger improvement in Year 6 Reading Literacy scores between ISA sittings for Indigenous students than for non-Indigenous students.
- Predictors of change in ISA scores are literacy and numeracy test scores.
- Very few students in Years 4 and 8 (trial and non-trial) performed well on the World Class Tests (WCTs) in problem solving.
- Predictor of WCT problem-solving score for 13-year-olds is numeracy test score.
- State school teachers' attitudes to external testing are not positive.
- Students (trial and non-trial) are not test-wise.

Teachers and teaching

- Replication of QSRLS coding showed improved teaching strategies in three categories of Productive Pedagogies: *intellectual quality, recognition of difference,* and *social support*. No change in *connectedness*.
- Students rated teachers in trial schools higher than teachers in non-trial schools for three categories of Productive Pedagogies: *recognition of difference, social support,* and *connectedness*. No significant difference in *intellectual quality*.
- Year 5 students gave teachers higher ratings than did Year 8 students for all four categories of Productive Pedagogies.
- The QSRLS-observed decline in *intellectual quality* and *connectedness* from primary to Year 8 was checked. No change in *recognition of difference* and *social support*.
- Relative decrease over time in measures of teachers' *staff morale* and *work roles.*
- The general teacher view (slightly stronger for primary than secondary; no difference between trial and non-trial) is that assessment lacks validity, is inaccurate, and is not for school accountability.
- Teachers believe that assessment enhances teaching and learning.
- Teachers felt some anxiety about grading and assessment.
- Teachers experienced the assessment regime as demanding.
- The observed enhancement of teachers' skills and confidence in assessment was related to participation in moderation.
- Collaboration between teachers increased as they worked across subject areas and drew on a range of skills among other school staff.
- Teachers give attention to connectedness and transferable skills.
- Teachers value student work for more than just superficial features (but not always).
- Teachers showed incomplete understanding of the notion of backwards mapping in curriculum planning.
- No change over time for teachers in trial schools while comparison schools declined in level of satisfaction with *professional development.*
- Survey results reported significantly higher mean values for trial schools than comparison schools on *collective activity*, *shared decision-making*, *supportive leadership*, and *openness to innovation*.
- Teachers used full range of available grades for reporting student achievements.

- Teachers are gradually coming to terms with the amount of discretionary power they now have to make principled decisions about curriculum delivery.
- Teachers had to face a demanding assessment regime while being ill-equipped to operate an assessment program consistent with statewide norms in a traditional setting.

Schools

- Require comprehensive structural change to align operational planning and administration with a model of shared ownership of reform.
- Had limited success in aligning operational planning and shared ownership of the reform—despite best efforts of some staff—in traditional large schools without pre-existing approaches to collaboration.
- Barriers to change included partial implementation of New Basics, traditional faculty structures and cultures, and variations in teaching perspectives.
- Found solutions amenable to existing teaching perspectives in schools where the multi-age structure presented a challenging operating environment for Rich Tasks.
- Experienced more difficulty working across disciplines in traditional high schools than in schools with an established middle-school focus.
- Found it more difficult for their Year 9 teachers than for teachers in earlier years to meet challenges to existing practice.
- Experienced a shortfall in meeting their commitment that all students would be given the opportunity to complete all tasks in a suite (80% completion rate).
- Showed the lowest compliance rate for two tasks in Year 6 that are intrinsically difficult.
- Had the highest compliance rates for Year 3.
- Can be hindered in completing Rich Tasks if technology support is not available.
- Changed principals frequently: During the course of the Trial, 118 individuals occupied the principal's chair in the 38 trial schools.
- Experienced significant teacher turnover and loss of New Basics knowledge, which impeded team plans in schools and impacted on teachers' sense of ownership of the reform.

Parents and community members

- Parents are only slowly becoming aware, as a parent community, of the different relationships that are possible to link students with life outside the school.
- Trial school parents awarded uniformly higher scores than did non-trial school parents to all six aspects of schooling—*quality curriculum*, *improved learning*, *effective teaching*, *confidence in public education*, *technology adoption*, and *learning environment*.
- Community members were able to identify richness in student work.
- Community members shared notions of richness that were common with those of educationists.
- Community members recognised three dimensions of richness: *intellectual engagement*; *engagement in and across disciplines*; *engagement in significant problem solving, decision-making and action*.

- Community members addressed some cultural, political and environmental aspects of Rich Tasks in their local communities.
- Community members were not envisaged by schools as part of a school's professional learning community (community often referenced as immediate parent body).
- Community members were not fully exploited in terms of their proposed new role in the New Basics.

Messages and communicating

- Critical friends were most effective when they had been carefully chosen for the role and when funding was distributed by principals so that the critical friend could assist with reform through effective contact with teachers.
- Schools did not hear some intended messages about New Basics, some messages were transmogrified, but some were heeded. Local conditions and school culture were factors contributing to the variable uptake of messages.
- Electronic discussion lists required active management otherwise they tended to actually work against the reform agenda.
- Five factors affected the rate at which stakeholders adopted the New Basics—relative advantage, compatibility (degree to which it matches the values and experiences of stakeholders), complexity (degree to which stakeholders find it easy to understand the features, benefits and "real" values of the program), divisibility (degree to which it can be tried on a limited basis), and communicability (degree to which the program outcomes are observable and can be described to others).
- Clearly identifiable value drivers emerged from the responses to the introduction of the New Basics by teachers, principals and parents in trial and non-trial schools: For teachers the value driver was *Getting back to the business of teaching* to focus on the craft of teaching. For principals it was *Getting back to the business of teaching* to focus on the education of students and allow teachers to concentrate on, and take control of, their craft. Parents expressed as their value driver: *Help our children to live a balanced life through a stronger connection with the real world*.

Dr Gabrielle Matters
Director
Assessment & New Basics
Queensland Department of Education and the Arts
Tel: +61 7 3225 8318
Fax: +61 7 3237 1956
Mob: 0412 445 028
E-mail: <gabrielle.matters@qed.qld.gov.au>
Website: http://education.qld.gov.au/corporate/newbasics

18 October 2004