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STANDARDS AND QUALITY IN ENGLISH PRIMARY SCHOOLS OVER TIME: THE NATIONAL EVIDENCE

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This briefing draws on Primary Review Research Report 4/1 *Standards and Quality in English Primary Schools Over Time: the national evidence*, by Peter Tymms and Christine Merrell. The report was commissioned to review representative published data and research on standards in primary education over time, a matter which is both important and controversial. **The full report lists all sources consulted and is available at www.primaryreview.org.uk.**

In the report:

- 'standards' are taken to mean the levels attained rather than the levels which are set as expectations;
- 'quality' is taken to mean a judgment about the level attained against an implicit or explicit view of what is appropriate.

The limitations of research to date

Assessment of levels of academic attainment in mathematics and reading form the mainstay of work which has been carried out, but Report 4/1 proposes seven separate areas which would form a more complete structure for the monitoring of educational quality and standards. The areas are:

- *Affective* (e.g. attitudes, aspirations, quality of life).
- *Behavioural* (e.g. skills, cooperation, initiative).
- *Cognitive* (e.g. academic achievement).
- *Demographic* (e.g. gender, socio-economic status).
- *Expenditure* (e.g. financial, temporal).
- *Flow* (e.g. who is taught what for how long, curriculum balance).
- *Growth* (e.g. physical, motor and health development).

Report 4/1 concentrates on just three of the seven areas (Affective, Cognitive and Flow) because that is where the research has been focussed. The other areas, of course, are also important.

Key findings in relation to the three research areas

Affective

- The attitudes of primary children towards their learning are generally positive although they decline with age.
- Primary pupils' attitudes are noticeably more positive towards reading than mathematics.
- Since the late 1980s the attitudes of children in the upper primary age range have declined with respect to reading.
- Attitudes to mathematics, though less positive than towards reading, have remained stable.
- There is also evidence that stress levels among pupils have increased as testing has increased.

Cognitive

- Overall, standards of attainment in reading in English primary schools have been more or less static since the 1950s.
- There was a small improvement in primary reading standards after the immediate post-war period, a small drop immediately following the introduction of the National Curriculum and a slight rise after that.
- Standards of mathematics have slowly but gradually risen over the years, though with small regressions and accelerations here and there. The most substantial improvements have been since 1995.
- Statutory test results at the end of Key Stage 2 rose dramatically between 1995 and 2000. The rises exaggerated the changes in pupils' attainment levels and were seriously misleading.

Flow

- The post-1988 apparatus of National Curriculum, national testing, league tables and inspection put teachers under considerable pressure.
- There has been an increase in whole-class teaching in primary schools, especially since the introduction of the National Literacy, Numeracy and Primary Strategies, yet the quality of the discourse between teachers and pupils on which higher-order learning critically depends has remained low-level.
- By 2002 there was evidence of a narrowing of the curriculum in English primary schools.

The absence of significant data

In relation to the seven areas listed above, four are characterised by a relative paucity of data of a kind which would provide a fuller picture of educational standards in primary schools over time: *behavioural, demographic, expenditure and growth*. In particular, we need to know:

- How the behaviour of primary aged pupils changes as they age and how it has changed over time.
- How the backgrounds of children have changed; of key interest are the changing language backgrounds of children.
- How the reading of the poor readers has changed.
- How the growth trajectory of children has changed (height, weight, coordination etc.).
- The impacts of initiatives.
- The cost-effectiveness of policies in all areas.

Main implications for policy

Primary Review Research Report 4/1 demonstrates the essential stability of the English primary educational system and the difficulty of impacting on children's learning in any major way in a controlled fashion. The attainment levels in the fundamental areas of reading and mathematics over time are most notable for their stability although it is good to see the modestly rising standards in maths. Massive efforts to bring about change have had a relatively small impact. These policies have cost many hundreds of millions of pounds but they have generally not had a sound research base and have not been systematically evaluated. The messages are clear:

- Policies need to be much more closely tied to the research evidence.
- Strategies should be trialled and scientifically evaluated before introduction on a national basis.

Statutory testing appears to militate against efficient monitoring. The tests need to change so as to reflect curriculum changes; currently, almost every child is assessed within a high stakes system. But, good monitoring data comes from using the same test every year and we are surely interested in questions which go beyond the curriculum and which address some of the lacunae identified above. Further, for monitoring purposes it is not necessary to assess all pupils: sampling techniques can be used very efficiently. Therefore:

- A new independent monitoring system is needed.

Additional research

The policy implications and areas of uncertainty listed above imply a considerable research agenda. What is clear is our ignorance. We know surprisingly little about the long term and, in many cases, the short-term educational consequences of recent government initiatives and strategic changes. We are not short of opinion on 'what works', and there is a growing body of post-hoc research and evaluation, but we are short of firm evidence grounded in randomised pre-intervention trials and systematic reviews. The following areas for urgent long-term investigation are proposed partly because they are important and partly because the evidence on them is currently so weak.

- ***In relation to flow.*** What age should children start school? Should it vary according to readiness? What are the most effective approaches to literacy and numeracy in the pre-primary stage?
 - ***In relation to behaviour.*** What approaches, if any, could be adopted at the primary stage which would reduce the likelihood of anti-social behaviour when children enter adolescence?
 - ***In relation to assessment.*** Should statutory testing be dropped in primary schools? What might replace it? Should league tables be abandoned?
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FURTHER INFORMATION

The report on which this briefing is based: Tymms, P., Merrell, C. (2007) *Standards and Quality in English Primary Schools Over Time: the national evidence (Primary Review Research Survey 4/1)*, Cambridge: University of Cambridge Faculty of Education. ISBN 978-1-906478-01-8.

The report is available at www.primaryreview.org.uk and is one of 32 Primary Review interim reports. Two of these deal with the opinion-gathering strands of the Review's evidence base. The remainder report on the thirty surveys of published research which the Review has commissioned from its 70 academic consultants. The reports are being published now both to increase public understanding of primary education and to stimulate debate during the period leading up to the publication of the Review's final report in late 2008.

The Primary Review was launched in October 2006 as a wide-ranging independent enquiry into the condition and future of primary education in England. Supported by Esmée Fairbairn Foundation, it is based at the University of Cambridge Faculty of Education and directed by Professor Robin Alexander.

The Review has ten themes and four strands of evidence (submissions, community and national soundings, surveys of published research, and searches of official data). The report summarised in this briefing relates to the **Research Survey** strand and the theme **Quality and Standards**.

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For the text of the full report, and for other interim reports in this series, go to www.primaryreview.org.uk/Publications/Interimreports .

This briefing, and the report which it summarises, have been commissioned as evidence to the Primary Review. The analysis and opinions they contain are the authors' own.