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Cambridge Primary Review Trust
Research Briefing 1
(new series)

ASSESSMENT, STANDARDS AND QUALITY OF LEARNING IN PRIMARY EDUCATION

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This briefing draws on the report *Assessment, Standards and Quality of Learning in Primary Education*, commissioned from Wynne Harlen by the Cambridge Primary Review Trust. It is one of a series of surveys of published research designed to supplement those published in *The Cambridge Primary Review Research Surveys* (Routledge, 2010).

The report covers:

- the various forms that assessment can take
- the purposes of assessment, particularly formative and summative
- the uses of summative results for reporting pupils' progress and for accountability
- the impact of assessment on curriculum content and pedagogy
- the assessment system in England and, for comparison, in Scotland, Wales, Northern Ireland, New Zealand, Sweden and France
- discussion of current national assessment arrangements in England in light of recent trends in assessment systems in other countries
- implications for assessment policy and practice.

Purposes, uses and impact of assessment

Assessment is a process of making judgements about pupils' learning; it involves decisions about what evidence to use, how to collect and interpret it and how to report the judgements. The assessment of pupils' learning has two main purposes. One is to help learning; this is referred to as formative assessment, or assessment *for* learning (AfL). The other is to summarise and report on what has been learned, referred to as summative assessment or assessment *of* learning. Whilst formative assessment has only one main use, to help learning, results of summative assessment are used in various ways, some relating to individual pupils and some to the aggregated results of groups of pupils.

Assessment has an unavoidable impact on the curriculum content and pedagogy experienced by pupils. The impact can be positive or negative. An effective assessment system supports learning in a variety of ways, from providing formative feedback for use in short-term decisions about learning activities to providing information about pupils' achievement for use in reporting to parents, in longer-term planning and as part of school self-evaluation. Well-designed assessment tools can help to clarify and communicate the meaning of learning objectives. However, negative impacts arise when what is assessed reflects only easily tested aspects of learning, compounded by attaching rewards and punishments to the results, giving them 'high stakes'. The pressure on teachers to increase test results is transferred to pupils, even if the tests are not high stakes for pupils. Research shows that when this happens, teachers focus teaching on the test content, train pupils in how to pass tests and feel impelled to adopt teaching styles which do not match what is needed to develop real understanding. Initially this effort increases test scores, but scores soon level off as the effect degrades.

The assessment system in England

In England considerable changes to the assessment arrangements of primary schools are being introduced for implementation by 2016. A revised National Curriculum for England, introduced in 2014, sets out the programmes of study for the subjects to be taught. For the core subjects of English, mathematics and science the curriculum is set out in considerable detail, with non-statutory expansions and examples. For these core subjects, KS2 is divided into 'lower KS2' (Years 3 and 4) and 'upper KS2' (Years 5 and 6). As well as a general statement of what is intended in KS 1 and in each of the two halves of KS2, 'what is to be taught' is set out for each year. For the non-core subjects KS2 is not divided and the programme of study is expressed only in general terms for the whole of KS1 and KS2. In marked contrast with the 1999 version, attainment targets are no longer set out in the eight levels, plus a description of exceptional performance. To replace levels as a means of reporting pupils' performance new 'performance descriptors', linked to the National Curriculum, are being developed for implementation in 2016.

Teacher assessment is the main method of assessment at the end of KS1, informed by tests in mathematics and reading externally set but marked by teachers. From 2016 test results will be expressed as a scaled score (a score which has been translated from a raw score onto a score on a fixed, defined scale). Teacher assessment of speaking and listening and of science will continue to be reported, with results expressed in terms of new performance descriptors.

At the end of KS2 pupils sit tests in mathematics, reading, grammar, punctuation and spelling, which are externally set and marked. As for KS1, results of tests will be reported to pupils and parents as scaled scores from 2016 and parents will be given information about their child's score together with the average for the school, the local area and nationally. For non-core subjects schools are free to use their own assessment and reporting methods.

Assessment systems in other countries

Of the seven systems briefly described in the report, England is the only country using externally marked tests in primary education for reporting individual pupil achievement. Wales, Sweden and France require tests in aspects of language and mathematics, but these are marked by teachers and have a role in informing teachers' assessment. In Scotland, Northern Ireland, France, Sweden and New Zealand, teachers are provided with banks of activities and tools which they can choose to use in making their summative judgements. Tests are also used in France, New Zealand and Scotland for monitoring regional and national standards, but in all cases these are quite separate from tests used by teachers. These surveys use a matrix sampling design and involve a relatively small sample of pupils on each occasion. They are part of an ongoing programme designed to assess national performance at any one time and to monitor changes across the years. A large number of items can be used in a survey, with any one pupil taking only a few of those included. Thus together the survey items can provide a good sample of the curriculum content, although only in New Zealand does the range extend beyond the core subjects. In England, sample test are carried out in science only.

All the systems reported here either implicitly or explicitly encourage the use of assessment to help learning. However, there is no statutory requirement for formative assessment, in recognition that it is a feature of teaching and the relationship between teacher and pupils that cannot be mandated. Of course it can be encouraged through non-statutory guidance and through the criteria for school self-evaluation and inspection. The specific help given to teachers is most detailed in Scotland, New Zealand and Sweden. In these systems there is an expectation that pupils will be given a role in the decisions about their work and so they will need to know the goals to work towards and the criteria by which the quality of their work is judged by the teacher and by themselves.

For summative reporting, assessment by teachers has the potential for covering the full range of important learning outcomes, unlike tests that can only include a small sample of possible items. The reliability of teachers' assessment can be raised in several ways, most commonly through group moderation. Experience in several countries shows that the time this takes is more than compensated by the benefits to learning and teaching. Using teachers' judgements means that the evidence gathered in on-going activities can be used to help learning as well as providing the latest and best evidence that is reviewed in terms of reporting criteria at those times when this is required. Thus summative assessment by teachers can be in synergy with formative assessment.

Conclusions

The report concludes with the following implications for the assessment practice of those working in English education as classroom teachers, school leaders, policy-makers and teacher educators.

Classroom teachers

- Teachers should use a range of assessment methods that enable the full range of goals of learning and progression towards them to be addressed and that do not restrict the breadth of the curriculum.
- Teachers use evidence from their on-going assessment to help pupils' learning, summarise learning in terms of reporting criteria and reflect upon and improve their teaching.
- Teachers should use assessment to advance pupils' learning by using on-going evidence of learning to adapt the pace, challenge and content of activities, giving feedback to pupils about how to improve or move forward and providing time for pupils to reflect on and assess their own work.
- Teachers should base their summative judgements of pupils' learning outcomes on evidence drawn from a range of sources which might include tests as well as regular class activities.

School leaders

- There should be a school policy for assessment that requires teachers to conduct effective formative and summative assessment, emphasises formative assessment with summative judgements made only when necessary to check and record progress, and is regularly discussed among teachers and shared with parents.
- Assessment should be conducted through methods consistent with pedagogy that promotes understanding and the development of thinking and learning skills.
- Teachers should be encouraged to specify in their lesson planning how to gather evidence of pupils' learning so that assessment is aligned to the curriculum.
- Time should be made available for teachers to meet and discuss assessment and on occasion to observe each other's practice.

Policy-makers

- The current use of externally produced and marked tests should be replaced by moderated and well-supported assessment by teachers, which can provide information of greater dependability across all subject areas.
- Assessment criteria, linked to programmes of study, should be provided for all subject areas and sub-sections within them so that assessment can be used to help learning and provide a complete record of achievement across the full curriculum.
- Moderation to improve the reliability of teachers' summative assessment should be required, and action taken to overcome distrust through openness about procedures and wider recognition that any assessment is subject to unavoidable errors and results should be treated as approximations.
- Monitoring of national standards should be based on sample surveys using a large number of items within a rolling programme which extends beyond the core subjects.

Teacher educators

- Initial teacher education and professional development should ensure that teachers have the skills to use assessment to support learning and to make reliable summative judgements for reporting pupils' attainment.
- The solid support in the academic literature and research for formative assessment should be reflected in the resources, including time, provided in teacher education courses for developing practices such as questioning, providing feedback, sharing goals with pupils and encouraging pupil self- and peer-assessment.
- Group moderation of teachers' judgements of pupils' work should be recognised as a valuable form of professional development.

FURTHER INFORMATION

The report on which this briefing is based: Harlen, W. (2014) *Assessment, Standards and Quality of Learning in Primary Education* (CPRT Research Survey 1), York: Cambridge Primary Review Trust. ISBN 978-0-9931032-0-9.

The report is available at www.cprtrust.org.uk. The website also contains information about other surveys in this series, and those related to the Cambridge Primary Review.

Cambridge Primary Review Trust was established in December 2012 with the aim of consolidating and building on Cambridge Primary Review's evidence, findings and principles. Supported by Pearson Education, it is based at the University of York and chaired by Professor Robin Alexander.

The Trust has eight priorities (equity, voice, community, sustainability, aims, curriculum, pedagogy and assessment) and four programmes (policy, research, schools, professional networking and development).

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