



National Research and Development Centre
for adult literacy and numeracy

Research briefing

Formative assessment

This is one of a series of publications produced to provide up-to-date summaries of recent research findings from the National Research and Development Centre for Adult Literacy and Numeracy (NRDC) and associated organisations. The series features summaries in each of the following areas:

- Family literacy, language and numeracy (FLLN)
- Formative assessment
- Numeracy
- Persistence
- Priority groups
- Progression

Formative assessment

Introduction

This paper summarises the key messages from NRDC and other research and development activity on formative assessment in adult learning. This has been an under-researched area: much of the work on formative assessment in the UK and internationally has been carried out in compulsory or higher education. While this has generated a solid evidence base supporting the usefulness of formative assessment and identifying general techniques and activities that teachers can use with their students, until recently there had not been an attempt to relate these ideas to adult learning or to review the literature to learn how formative assessment can work with adult learners. However, recent research suggests that formative assessment may be particularly useful for adult learners, in a variety of settings.

This short paper explores research on the use of formative assessment, discusses what formative assessment is and is not, briefly explains some key formative assessment strategies, and looks at challenges to the expanded use of formative assessment in adult learning.



What the research shows

The research background

There is a wealth of research evidence demonstrating the effectiveness of formative assessment in compulsory schooling and higher education. In *Inside the Black Box*, for example, Black and Wiliam (1998) found that formative assessment practices were associated with some of the largest gains in learner achievement ever reported for any educational intervention, and that the evidence of those benefits was particularly apparent for previously underachieving learners. In this study, researchers found that numerous formative assessment techniques improved knowledge and understanding while also increasing learner motivation and self-esteem. These techniques included feedback through marking, open-ended questioning, peer- and self-assessment, and the formative use of summative tests.

Other research has drawn similar conclusions. For instance, after analysing evidence from thousands of studies on teaching interventions around the globe, John Hattie (2003) has concluded that feedback, the central mechanism of formative assessment, is the single most effective educational intervention, offering greater positive impact than any other technique.

Formative assessment in adult learning

While most of the research on formative assessment has focused on compulsory and higher education, there is a small but growing body of research into the efficacy of formative assessment in adult learning, and there are suggestions that formative assessment may be even more beneficial in adult learning than in other educational settings. The 'Improving Formative Assessment' project, jointly funded by the NRDC, the Quality Improvement Agency (QIA) and the Nuffield Foundation, was designed to support teachers' formative assessment practices and to develop new theoretical knowledge about the principles and practices of effective formative assessment in post-compulsory education.

Defining formative assessment

Formative assessment is assessment *for* learning, as opposed to assessment *of* learning (Black and Wiliam 1998). In assessment for learning, the first priority of the assessment is not to increase accountability, establish rankings, or certify competence. It is to promote learning.

To accomplish this, the interaction between teacher and learner is key. Formative assessment requires teachers to make regular assessment of learners' understanding and progress in order to identify individual learners' needs and to shape teaching and learning accordingly. The tutor's primary role is to facilitate the learning process, not to impart information. Ideally, assessment is not just frequent but is continuous and/or

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systematic – i.e. it is an integrated feature of the learning offer. Most importantly, what the teacher learns from assessment should be used to adapt his or her teaching to better meet learner needs, which are likely to be evolving constantly. Without adaptation the assessment is not formative, it is merely frequent.

Formative assessment is sometimes confused with continuous or modular assessment, in which assessment of certification and/or progress is spread throughout the learning programme instead of occurring only at the end. However, this process is summative rather than formative. Formative assessment is more interactive and developmental, requiring teachers to use their experience and judgement to help learners develop.

Formative assessment strategies

Research on formative assessment has identified several effective strategies. These include: giving feedback through marking; improving the quality of questioning and dialogue; the use of peer- and self-assessment; encouraging learner talk; and the formative use of summative tests.

Feedback

Effective feedback is at the heart of formative assessment. Whether verbal or written, it should focus on the task rather than the person. It should be constructive and practical, and be returned as soon as possible. Grades, marks and evaluative remarks that do not provide information or advice about how to improve performance should be avoided. Comment-only marking – i.e. without marks or grades – can also be effective. Above all, feedback should cause thinking to take place.

Questioning

Teachers should develop a repertoire of questioning techniques, and share ideas with colleagues to maintain and develop this repertoire. One effective strategy is to increase the proportion of higher level questions – that is, questions that require learners to think rather than to recall facts or procedures. Questioning that aims to develop thoughtfulness is more useful than questioning for accuracy and correctness. Double questions, leading questions, rhetorical questions and closed questions are less useful, because they discourage learners from reflecting on a problem or revealing what they do not understand. Much more useful are open questions which require students to find their own words. It is also often useful to increase the waiting time after asking a question to give learners adequate time to offer an answer (see Swain et al. 2006).

Encouraging learner talk

Talk in the classroom has several purposes: not only does it enable teachers to assess learners, it enables learners to assess themselves. One way to encourage more talk by learners is through 'saying less, listening more'. By saying less themselves, teachers allow

and encourage students to speak more and thus reveal more about their understanding. This has been referred to as interpretive listening: listening to what students say in order to figure out why they have said it and what to do next (Davis 1997). This is in contrast to the more commonplace practice of evaluative listening, where teachers ask questions to which they already know the correct answers and typically give short, evaluative feedback to learners' responses.

Another way to encourage more talk is to cultivate a relaxed, open environment. Formative assessment depends on students feeling secure enough in the classroom to face challenges and take risks in asking questions or advancing propositions that might reveal their lack of understanding. As far as possible, teachers should structure learning as a dialogue both between themselves and their students, and among students. Teachers should also encourage students to see themselves and their peers as the architects and engineers of their own learning. This demands a significant amount of rich, interactive, multi-directional communication.

Peer- and self-assessment

Learner talk and an open, interactive environment go hand in hand with peer- and self-assessment. Encouraging learners to assess and evaluate each other's methods and ideas enables learners to better understand what they themselves know, and to express where they want to go next.

The formative use of summative assessment

Summative assessment plays a central role in current adult education policy-making, and may discourage formative assessment by encouraging teachers and learners to focus on certification-directed tests rather than learning per se. At the same time, it is a mistake to think that assessment is either formative or summative. In truth, summative assessment processes can be used for formative purposes. One way of thinking about this is through the analogy of tasting soup (Hattie 2003).

Feedback should focus on the task rather than the person.

When soup is tasted at the dinner table, the assessment is summative. When it is tasted during the cooking process, the assessment is formative. The process is the same, only the aims and timings are different.

Using summative assessment formatively means finding ways to encourage students to get beneath and go beyond the results of summative assessment processes and to try to understand how they work and reflect on what they mean. Teachers can and should aim to balance the demands of summative assessment with the long-term needs of their learners. This means focusing on the capacity of learners to plan, develop and evaluate their own learning and that of others, even within the context of a target driven learning sector that is heavily reliant on summative assessment.

Challenges

Despite the widespread take-up of formative assessment in compulsory and higher education, a number of studies have highlighted the difficulties in properly implementing the practice, finding that formative assessment concepts have often been misunderstood or misapplied. Little wonder: formative assessment is not easy, nor is integrating it with other teaching practices. Teachers need judgement, sensitivity and no small measure of courage to transform the teaching process into one of dialogue, continual feedback, and regular readjustment based on that feedback.

Teachers also need time. Learner talk, peer-assessment, feedback, and the regular readjustment of teaching to meet evolving learner needs takes time, something that most teachers do not have in abundance. Making the most of often fleeting opportunities for formative

assessment can be challenging. The fostering of 'formative assessment moments' is crucial, but this creates additional tasks for the teacher: how to notice such moments, and how to make best use of them?

Just good teaching?

To many practitioners, the goals of formative assessment are 'just good teaching'. In many ways this is true. However, a key strength of formative assessment is that it encourages consistent focus on effective practices that might otherwise be pushed on to the backburner due to time constraints, the demands of summative assessment, or other factors. One of the practitioner respondents in our Improving Formative Assessment project mentioned:

'I was perplexed as to what was new about formative assessment, because it seemed to me that this was what we had all been exhorted to do. But on reflection I suppose that although it is what we are supposed to do, for various reasons it is not what we actually do.'

Focusing on formative assessment as a key element of the learning process encourages effective practice on behalf of teachers, and can help develop motivation, confidence and autonomy in learners. NRDC research has also found a clear link between formative assessment, motivation and achievement.

Scope of this paper

This paper is based on research on formative assessment, both in adult learning and elsewhere. The key messages are drawn from a range of resources, the most recent of which are two projects by the NRDC and one for the Organisation of Economic Co-operation and Development (OECD) to which the NRDC contributed. These three projects are summarised below.

English-language literature review

The aim of this NRDC study was to explore how methods or activities in formative assessment might work with adults, their possible impact on learning and achievement, and the implications for implementation. Ninety-nine texts were reviewed. These included academic papers, policy documents and publications dealing with self-assessment and formative assessment that were aimed at adult learners or which referenced lifelong or adult learning.

Improving the quality of teaching and learning in numeracy and formative assessment

This NRDC project focused on the development and evaluation of teaching strategies for formative assessment in numeracy. Researchers from King's College London worked with a team of teacher-researchers to evaluate the changes in classroom practice that occurred during the project, and the processes by which these changes came about.

Teaching, learning and assessment for adults: Improving foundation skills

This international study analyses data drawn from an international review of literature, case studies of exemplary practice drawn from seven countries, and country background reports. Undertaken for the OECD by the Centre for Educational Research and Innovation, and with the NRDC contributing to the section on England, the study complements an OECD report on formative assessment in lower secondary schools which found that formative assessment promotes greater equity of student outcomes and builds skills for learning to learn. The goals of the study were to find out what is known about the impact of different learning, teaching and assessment practices for adult literacy, language and numeracy learning and how effective practice can happen on a wider basis.

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Formative assessment

Key points

- There is a wealth of research demonstrating the effectiveness of formative assessment in compulsory and higher education, and a small but growing body of research illustrating the benefits of formative assessment in adult learning.
- Formative assessment is assessment *for* learning, as opposed to assessment *of* learning.
- Frequent assessment is not necessarily formative assessment.
- Key formative assessment techniques include feedback, questioning, encouraging learner talk, and peer- and self-assessment.
- Feedback is at the heart of formative assessment, and should always provide information about how to improve performance.
- Formative assessment can be difficult to implement, because it takes time, which teachers often have little of. It also requires energy, judgement and courage, traits that many teachers have in abundance.

NRDC
Institute of Education
University of London
20 Bedford Way
London WC1H 0AL
Telephone: +44 (0)20 7612 6476
Fax: +44 (0)20 7612 6671
email: info@nrdc.org.uk
website: www.nrdc.org.uk

NRDC is a consortium of partners led by the Institute of Education, University of London. It includes:

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