

## Background notes

### Terminology

- Assessment **of** learning is also known as **summative** assessment.
- Assessment **for** learning is also known as **formative** assessment.

The change in language is helpful in clearing up the confusion about the nature and purpose of each type of assessment.

### Assessment of learning

Assessment of learning tends to be summative and carried out at the end of a unit or year or key stage. The teacher undertakes this kind of assessment to make judgements about a pupil's performance. Conclusions will probably be reported in terms of grades, marks or levels. These may be set alongside national standards, so that a pupil, school or teacher can evaluate their own performance against that of others. They also allow schools to track progress over time. Because the results of assessment of learning are shared with other people, issues of validity and reliability are paramount. There is also an important balance between making assessments that are rigorous and yet manageable. It has become increasingly important for school managers to explore and understand relevant assessment data. Heads of department in secondary schools, for example, need to interpret the performance of the pupils they receive and how they progress. This can help them to identify trends, set realistic targets and identify the needs of pupils. Assessment of learning is well established and there is now a broad consensus regarding its nature, summative purposes and importance. It is not always recognised, however, that by sharing expectations and targets with pupils, assessment for learning can contribute to assessment of learning. For example, pupils can be given experience of marking and moderating, and also reviewing test papers in the light of performance.

### Assessment for learning

Assessment for learning is formative in nature and takes place all the time in the classroom. Here are three useful definitions.

'In assessment for learning, the learner's task is to close the gap between the present state of understanding and the learning goal. Self-assessment is essential if the learner is to do this. The teacher's role is to communicate appropriate goals and promote self-assessment as pupils work towards the goals. Feedback in the classroom should operate from teacher to pupils and from pupils to teacher.'  
(Sadler, 1989)

'In this paper...assessment refers to all those activities undertaken by teachers, *and by their students in assessing themselves*, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged.'  
(Black and Wiliam, 1998)

'Assessment for learning involves:

- gathering and interpreting evidence about students' learning; and,

- learners and their teachers using that evidence to decide where students are in their learning, where they are going and how to take the next steps.’ (QCA and the Assessment Reform Group, 2001)

The key message is that assessment for learning depends crucially on *actually using* the information gained. Gaining information about pupils is only valuable if we then go on to do something with it for the benefit of the pupils.

### Inside the black box

The publication *Inside the black box* is an influential pamphlet that summarises the main findings arising from 250 assessment articles (covering nine years of international research) studied by Paul Black and Dylan William. The document is well known and widely used, and acts as a touchstone for most professionals in the field of assessment.

*Inside the black box* identifies five deceptively simple key factors in improving learning through assessment:

- providing effective feedback to pupils;
- actively involving pupils in their own learning;
- adjusting teaching to take account of the results of assessment;
- recognising the profound influence assessment has on the motivation and self-esteem of pupils, both of which are crucial to learning;
- considering the need for pupils to be able to assess themselves and to understand how to improve.

The research also identifies a number of risks with regard to assessment:

- valuing quantity and presentation rather than the quality of learning;
- lowering the self-esteem of pupils by over-concentrating on judgements rather than advice for improvement;
- demoralising pupils by comparing them negatively and repeatedly with more-successful learners;
- giving feedback which serves social and managerial purposes rather than helping pupils to learn more effectively;
- working with an insufficient picture of pupils’ learning needs.

The publication concludes that good assessment for learning:

- is embedded in a view of teaching and learning of which it is an essential part;
- involves sharing learning goals with pupils;
- aims to help pupils to know and to recognise the standards they are aiming for;
- involves pupils in self-assessment;
- provides feedback which leads to pupils recognising their next steps and how to take them;
- involves both teacher and pupils reviewing, and reflecting on, assessment data.

Assessment for learning is not just assessment that involves more than only marking and feeding back judgements. It is bound into next steps, looks forward as well as back, and is closely allied to forward planning.

### **Other research**

The King's Medway Oxfordshire Formative Assessment Project (KMOFAP) was a study of Key Stage 3 teachers and pupils in mathematics and science. Pupils, including the most able, made significant gains in attainment. Pupils appreciated the time given to resolving misunderstandings and reported a greater emphasis on understanding work and identifying future targets. For example, they were able to set useful questions, to devise and analyse their own mark schemes and undertake marking of each other's end-of-unit tests.

The following techniques were found to be useful:

- questioning;
- comment marking;
- identifying targets for improvement;
- self-assessment;
- peer-assessment;
- devising test questions;
- analysing and devising mark schemes;
- feedback from tests.

### **Further reading**

Assessment Reform Group (1999) *Assessment for learning: beyond the black box*. University of Cambridge, Faculty of Education

Black, P. and Harrison, C. (2001) Feedback in questioning and marking: the science teacher's role in formative assessment. *School Science Review* (June 2001)

Black, P. and Harrison, C. (2001) Self-assessment, peer-assessment and taking responsibility: the science student's role in formative assessment. *School Science Review* (September 2001)

Black, P. and Wiliam, D. (1998) *Inside the black box: raising standards through classroom assessment*

Black, P., Harrison, C., Lee, C. and Wiliam, D. (2001) Theory and practice in the development of formative assessment. Paper to the AERA Conference, Seattle (April 2001)

Black, P., Harrison, C., Lee, C., Marshall, B. and Dylan, W. (2002) *Working inside the black box: assessment for learning in the classroom*. King's College, London, Department of Education and Professional Studies (July 2002)

Sadler, R. (1989) Formative assessment and the design of instructional systems, *Instructional Science* 18, 119–144

## **Websites**

[http://www.qca.org.uk/ca/5-14/assessment for learning/](http://www.qca.org.uk/ca/5-14/assessment%20for%20learning/)

<http://www.aaia.org.uk>

## **Contact details**

*Inside the black box* and *Working inside the black box* can be obtained from King's College, London, telephone 0207 836 5454 ext 3189.

*Assessment for learning: beyond the black box* can be obtained from University of Cambridge School of Education, telephone 01223 369631.