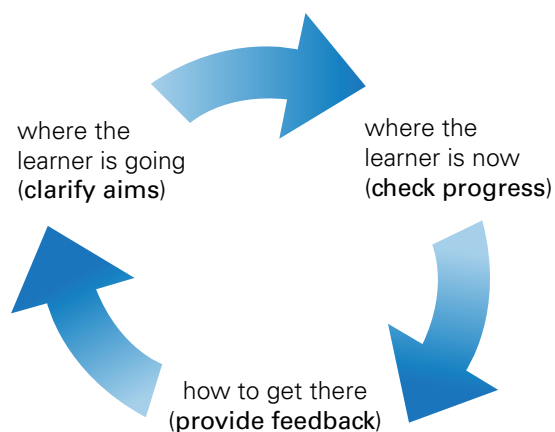


Assessment for learning

Cambridge International Examinations (Cambridge) considers ‘assessment *for* learning’ (AfL) to be an approach, integrated into teaching and learning, which creates feedback for students to *improve* learning. The term became popular in the 1990s when there was concern that learners were being over-assessed and too much testing was carried out to put learners in a rank order and make comparisons between them. That way of assessing, to *judge* learning by generating and reporting scores, was referred to as ‘assessment *of* learning’. These two phrases contrast different functions of assessment.

AfL is a vital component of effective teaching practice as teachers and learners cannot avoid giving and getting **feedback** from any learning activity. AfL is concerned with practices that maximise the value of the feedback process to ensure that learning is optimised. Feedback ranges from the **informal** (e.g. oral comments given immediately to learners as they think through problems), to more **formal** (e.g. written feedback, the use of instruments such as rubrics that help clarify and scaffold learning and assessment objectives). AfL also involves collaborative learning activities, such as peer and self-assessment.

By following well-designed approaches to AfL, teachers can understand better how their students are learning and use this to **plan** what they will do next with a class or individual students. AfL also helps the learner to see what they are aiming for and understand what they need to do to achieve those aims. AfL therefore focuses on the teacher and the learner understanding:



What other terms are associated with ‘Assessment for learning’?

- ‘Formative assessment’ has a similar meaning to AfL. The term was introduced earlier (in the 1960s by Michael Scriven) to contrast with ‘summative assessment’ and convey that assessment is also carried out **during** learning (not just at the end), to form students’ learning and **look forward** to what they will learn next (not just look back). Some use AfL as an updated term for formative assessment, some use the two terms synonymously, some see one term under the other broader term (e.g. AfL as ‘informal’ formative assessment), and some (e.g. Swaffield, 2011) see a difference between AfL (e.g. teaching and learning process) and formative assessment (e.g. purpose of certain assessments to guide future learning).

- ‘**Summative assessment**’ means the same as ‘**assessment of learning**’. Summative assessment sums up the learning of students at the **end** of periods of learning, for example, once a school term or a course has finished. As it **sums up** what the students have achieved, it **looks back** and indicates what the students have learned, sometimes measured against clearly defined standards. Some summative assessment is high stakes, for example when used for admission purposes. However, summative assessment can also be **used formatively** if it provides feedback to inform teaching and learning.
- ‘**School-based assessment**’ is often confused with AfL. It usually refers to parts of a summative assessment that are initially carried out by teachers. School-based assessment is usually work (e.g. science practicals, geography fieldwork) marked by teachers in the school, which is then externally moderated by examiners to help ensure reliability and added to other results obtained in external exams.
- ‘**Diagnostic assessment**’ usually refers to assessment that identifies what the learner already knows and is capable of at the beginning of a course to establish a starting point. The focus is often on identifying difficulties that the learner might have so as to help identify appropriate teaching and learning strategies.

What is the theory behind assessment for learning?

- AfL is closely associated with **socio-constructivist** theories of learning. Mental models and assumptions that the learner uses to understand a subject are complex and constructed from previous experiences and interactions with people. These need to be understood by teachers and learners and refined and developed in the process of education. AfL helps in this process by making learning visible. It helps learners understand more accurately the nature of the material they are learning (what constitutes ‘excellence’) and themselves as learners. This contrasts with the discredited notion that teachers can simply transmit knowledge and understanding directly to students. The quality of interactions and feedback between teachers and learners becomes critical in the learning process.
- Building on the formative assessment work by Michael Scriven and others, work about AfL in the UK was undertaken by Paul Black and Dylan Wiliam (1998). Their work (*Inside the Black Box*) was based on a literature review of research work on classroom assessment practices. Black and Wiliam concluded:
 - Teachers’ tests generally encouraged superficial learning, concentrating on recall of isolated details, usually items of knowledge which pupils soon forgot.
 - Teachers did not generally review the assessment questions that they used and did not discuss them critically with peers, so there was little reflection on what was being assessed.

- The grading function was over-emphasised and the learning function was under-emphasised.
- There was a tendency to use an approach that emphasised competition between pupils rather than personal improvement (a normative approach rather than a criterion approach).

Black and Wiliam proposed a regime of classroom assessment which:

- made clear what students had to do in order to succeed
 - encouraged productive classroom discussion
 - involved teacher feedback that helped the students to move on in their learning
 - provided opportunities for students to be learning resources for each other
 - devised strategies that encouraged students to take ownership of their own learning.
- David Carless (2011) considers formative assessment as a **continuum** of possibilities. He considers **restricted** formative assessment as a pragmatic, narrow version emphasising the teacher using assessment to modify their instruction process constantly to make sure they are on target. At the other extreme, **extended** formative assessment prioritises student use of assessment data to understand learning and become more autonomous. He argues that different contexts permit different approaches.





What are the benefits of assessment for learning?

- AfL helps learners focus on the **aim** of elements of their learning. This can help them understand what constitutes 'excellence', take responsibility for their own learning and plan how they might move forward.
- AfL creates a valuable **connection between assessment and learning** activities, as the clarification of objectives will have a direct impact on the devising of teaching and learning strategies and approaches.
- According to research (Hattie, 2009), 'feedback' has a **positive effect on learner achievement** (ranked 10th out of 150 factors), particularly if it involves feedback from learner to teacher about their own learning. Many other factors identified as powerful influences in Hattie's analysis are also closely associated with AfL, hence the title of his book, Visible Learning.
- AfL effectively implemented in the extended sense used by Carless (2011) can support students to become **confident, reflective, innovative and engaged** (at least 4 of the Cambridge learner attributes).

What are the challenges of assessment for learning?

- **Confusion:** The word 'assessment' leads to confusion because it is commonly associated with 'testing', whereas there are also other ways of judging learning besides testing. The term AfL has therefore mistakenly come to mean, for some people, any test from which one expects students will learn. The results of summative assessments can be said to be **used** 'formatively', but this doesn't mean that those assessments suddenly **become** formative, since their original purpose is what distinguishes these two types of assessment.

- **Risk:** An undesirable result of this confusion is that under the guise of 'formative assessment', there is a risk that the amount of summative assessing can increase. As noted earlier, the purpose behind developing the concept of AfL was to reduce the amount of summative assessment that learners were experiencing. In some cases even government schemes have been devised and promoted which describe as 'formative' what is in fact extra amounts of summative assessment, assessment of learning and not **assessment for learning**.
- **Culture:** David Carless (2011) argues, based on his experiences in Hong Kong, that there can be real barriers to effectively implementing AfL in Confucian heritage (and possibly other) cultural contexts. This is of particular relevance to many Cambridge schools that operate in settings where society places an absolute premium on summative assessment performance. Teachers are placed in a difficult position as they are judged solely on their ability to get good results in high-stakes summative assessments. He argues that the best way around this is to promote formative assessment as a mechanism for preparing students for summative examinations in the restricted sense of its meaning. If summative assessments are well designed, as Cambridge assessments are, then using feedback to modify instruction and help students understand how to perform best in the examinations will achieve better results by making the assessment objectives and criteria visible and better understood. This might be a less ambitious goal than purists of formative assessment would recommend, but it is realistic and attainable. It also presents a good starting point for improving professional practice that can then go onto more extended practices.

Practical tips:

How can schools make the best use of assessment for learning?

- Schools can encourage teachers to work together to **review and develop their assessment practice** so that assessment is seen as a positive method of encouraging students to learn and understand. They should be constantly working to improve their professional practice.
- Schools, teachers and learners should **discuss the topic** of how feedback from assessments will be given and used. The **processes** as well as the **products** of learning become a topic of interest.
- **Professional development (PD)** in AfL should be given a high priority. Developing effective practice has creative and scientific dimensions and teachers can always improve. For this reason, PD needs to be ongoing and linked to each teacher's own professional practice rather than a quick course. Cambridge PD emphasises AfL and there are also many other good PD opportunities beyond Cambridge.
- Teachers need **support putting principles into practice**; they are unlikely to adopt new ideas without seeing examples from teachers. Teacher learning communities can change habits and improve teaching.

How can teachers make the best use of assessment for learning?

- Much of AfL is skilled practice that is core to being a good teacher. It involves **multiple activities**, for example:
 - sharing exemplars at different levels of success according to certain criteria
 - use of open questioning to check and deepen understanding within and across lessons and skillfully using student responses to deepen understanding
 - feedback through marking, peer and self-assessment (e.g. through checklists of requirements)
 - formative use of summative tests – results can be used by teachers to change their teaching plans and by learners to highlight areas of development.
- Feedback might involve '**marking**', but a mark/grade may be all that the learner remembers. Breaking down a summative mark into its component parts and developing a sophisticated understanding of the criteria and standards used in the process of arriving at a mark is a powerful process when done well.
- Feedback needs to **be related to the learning goals** that formed the basis of the assessment objectives of the tasks. This will allow learners to use the feedback to improve.
- Skilled, extended AfL concerns **developing learner autonomy** so they are able to assess themselves and regulate their own learning. In this way, it supports development of the Cambridge Learner attributes.
- Many practical suggestions are available of **classroom practices** that enable learners to learn as a result of the teacher's assessment approach. (See the chapter on "Feedback" in Swaffield, 2009).



How is Cambridge supporting schools with assessment for learning?

- Cambridge is concerned that our syllabuses and assessments support the development of the **Cambridge learner attributes** and promote good teaching and learning practice in schools. Cambridge curriculum frameworks and syllabuses are expressed in terms of learning and assessment objectives, and this can help the teacher to point learners to what they need to focus on. When an understanding of these objectives is shared within a class, learners can help each other.
- **Cambridge Primary and Secondary 1 programmes**, including Cambridge Checkpoint, are specifically designed to help learners and teachers to assess progress and provide feedback on strengths and weaknesses in the core subjects of English, maths and science.
- **Cambridge professional development** includes AfL through: an online course on AfL, subject-based training and as part of all PD qualifications. (See separate Education Brief on Professional Development.)



Where can you find more information?

- Bennett, R. (2009) *A Critical Look at the Meaning and Basis of Formative Assessment*. USA: ETS.
- Black, P. and William, D. (1998) *Inside the Black Box: Raising Standards through Classroom Assessment*. London: School of Education, King's College
- Cambridge online AfL course: www.cie.org.uk/cambridge-professional-development/online-training
- Cambridge professional development qualifications: www.cie.org.uk/pdq
- Carless, D. (2011) *From Testing to Productive Student Learning: Implementing Formative Assessment in Confucian-Heritage Settings*. USA: Routledge.
- Gardner, J. (2012) *Assessment and Learning*, 2nd Edition. UK: SAGE Publications Ltd.
- Hattie, J. (2009) *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. Abingdon, UK: Routledge.
- *Implementing the Curriculum with Cambridge: A Guide for School Leaders*
www.cie.org.uk/images/134557-implementing-the-curriculum-with-cambridge.pdf
- Stobart, G. (2008) *Testing Times: The Uses and Abuses of Assessment*. Abingdon, UK: Routledge.
- Swaffield, S. ed. (2008) *Unlocking Assessment: Understanding for Reflection and Application*. Abingdon, UK: Routledge.
- Swaffield, S. (2011) 'Getting to the heart of authentic Assessment for Learning' *Assessment in Education: Principles, Policy and Practice* 18(4) 433-449.

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