



Education brief

Assessment for learning

Assessment for learning (AfL) is an approach, integrated into teaching and learning, which creates feedback for students and teachers in order to improve learning and guide their next steps.

What does assessment for learning mean?

AfL focuses on **both the teacher and student understanding** three key things:

- 1. Where the learner is going.** Sharing the aims of a lesson and success criteria helps learners to see what they are aiming for and what they need to do to achieve those aims.
- 2. Where the learner is now.** Techniques such as effective questioning will help teachers to gauge what individuals and groups have learnt during a lesson, generating evidence of learning that both teacher and students can make use of.
- 3. How can the learner get there?** Teachers use this evidence of learning to inform choices about what they will do next with a class or individual students. Learners can use this evidence to make decisions about their learning, such as how to spend their independent study time.



AfL is concerned with maximising the feedback process (teacher to student and student to teacher) to optimise student learning. 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 given after an end-of-topic test). AfL also involves high-quality **peer and self-assessment** where learners or peers may be involved in making decisions about future learning needs (William, 2018).

The term 'assessment for learning' became popular in the 1990s. At this time there was concern that learners were being over-assessed and that there was a disproportionate focus on end results (assessment of learning) rather than on assessment processes that could actively enable learners to make progress. Both assessment for learning and assessment of learning are valuable in education, but they have different purposes.

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What is the theory behind assessment for learning?

- AfL is associated with **social constructivist** theories of learning. Mental models and assumptions that the learner uses to understand a subject are complex, and are constructed from previous experiences and interactions with others. This means the quality of interactions between teachers and learners is critical in the learning process.
- The work of Paul Black and Dylan Wiliam has been highly influential. Their pamphlet for teachers called **Inside the Black Box** (1998a) was based on a literature review of 250 sources on classroom assessment practices (Black & Wiliam, 1998b). They found that 'the effective use of formative assessment [see below] would increase achievement by between 0.4 and 0.7 standard deviations, which would be equivalent to a 50 to 70 percent increase in the rate of student learning' (Wiliam, 2018, p.38).
- Black and Wiliam (1998a) suggested that formative assessment could be improved by:
 - helping **learners understand** exactly what they have to do in order to succeed
 - encouraging productive classroom **discussion**, including **sufficient thinking time**
 - embedding opportunities for **all learners to express their understanding**
 - providing **feedback** that helps students to move on in their learning and avoids comparison with other learners, then giving them the **opportunity** to act on that feedback
 - training learners in **self-assessment** and providing opportunities for them to be **learning resources for each other**.

What other terms are associated with assessment for learning?

- **Formative assessment** has a similar meaning to AfL. The term was introduced to contrast with summative assessment (see below), and show that assessment could be used to **form** students' learning and **look forward to** what they will learn next. Some writers in this area see a distinction between AfL and formative assessment (e.g. Swaffield, 2011), while some use the two terms synonymously (see Wiliam, 2018, for further discussion).
- **Summative assessment** means the same as **assessment of learning**. Summative assessment is used to sum up students' learning at the end of a period – 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 learnt, usually measured formally against clearly defined standards.

- **Diagnostic assessment** refers to assessment that identifies what the learner knows or is capable of, perhaps at the start of a new topic. The focus is on identifying difficulties or misconceptions that the learner might have so that the teacher can plan learning activities to address these.

Both summative and diagnostic assessment activities could also be used to support assessment for learning (see below).

What are the benefits of assessment for learning?

- AfL helps learners and teachers focus on the **aim** of their learning. This can help students understand what constitutes 'excellence', take responsibility for their own learning and plan how they might move forward.
- AfL encourages **assessment and learning** to be seen as an integrated whole. The clarification of objectives and feedback about student learning will have a direct impact on the devising of teaching and learning strategies.
- According to research (Hattie, 2012), 'feedback' has a **positive effect on learner achievement** (ranked 10th out of 150 factors), particularly if it involves feedback from learner to teacher. This is important as teachers need this information from learners in order to effectively modify their teaching. Many other factors identified as powerful influences in Hattie's analysis are also closely associated with AfL.

What are the challenges of assessment for learning?

- **Confusing function with instrument:** Sometimes an instrument (such as a test) is seen as formative or summative, when these terms are intended to describe the purpose of their use (Wiliam, 2018). For example, a mid-term test might have both a summative and a formative purpose. It sums up learners' attainment to that point, but it can also be reviewed and the information about learning used for a formative purpose, perhaps through an exam wrapper (see **Education Brief: Metacognition**), or to inform teachers' planning for the next series of lessons.
- **Fidelity of implementation:** Wiliam (2018, p.1), said that 'the **effective** use of formative assessment would increase achievement' (emphasis added). If AfL becomes a superficial exercise (for example a teacher formative comment copied by a student into a grid at the end of the unit, without any opportunity for the student to implement the feedback and with no change to future teaching), then it cannot be expected to make a positive impact on achievement.

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- **Assessing long-term recall:** Recent work from cognitive science encourages teachers to think about long-term recall of knowledge. This cannot be evaluated accurately when material has just been taught. Teachers need to plan opportunities for tests (which could be low stakes), which are spaced out over a period of weeks or months to encourage long-term recall (EEF, 2014).
- **Change of practice:** It can be challenging to implement AfL practices in a context where learners, teachers and parents are only familiar with summative assessment. It is important to explain the rationale for changes, for teachers to understand them thoroughly and to implement them slowly over time (Black & Wiliam, 1998a). In particular, careful scaffolding and preparation is needed for learner self- and peer-assessment.
- **Workload:** In some contexts, the implementation of written marking practices has had a negative impact on teacher workload (EEF, 2016). It is important that AfL is embedded in everyday classroom practice (for example oral feedback at the point of need) and that written feedback is high-quality and strategically placed when it will have most value.

Practical tips:

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

- **Professional development** in AfL should be given a high priority. It needs to be ongoing and linked to each teacher's own professional practice.
- Schools can encourage teachers to work together to **review and develop the school's assessment policy and practice** so that assessment is seen as a positive method of encouraging students to learn and understand, without becoming an unreasonable burden on teacher workload.
- Make sure that **written and oral feedback** across the school is accurate, easy to understand and focused on learning, also that learners have the opportunity to put it into practice (Wiliam, 2018).
- Teachers need **support putting principles into practice**. Teacher learning communities can change habits and improve teaching (see **Getting Started with Peer Observation**).
- **Evaluate the impact** of new strategies that are implemented, whether these are tried across the whole school or by individual teachers or departments (see **Getting Started with Evaluating Impact**). **Allow a** reasonable length of time for new strategies to impact on learner outcomes (Wiliam, 2016).



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 strategies** – e.g.:
 - Sharing learning intentions and success criteria in an accessible and engaging way (Hattie & Clarke, 2019) and checking if learners have understood them.
 - Using questioning to check and to deepen understanding within and across lessons. All-student response systems are a helpful way to gauge developing understanding across the whole class e.g. learners using mini-whiteboards to respond to hinge-point questions (Wiliam, 2018).
 - Using focused feedback from teacher, peer-, and self-assessment.
 - Giving formative feedback without marks and/or grades as appropriate. Providing formative comments **linked to specific success criteria** can focus the learner on what they need to do to improve a piece of work without the distraction of marks or grades.
 - Making formative use of summative tests. Results can be used by teachers to change their teaching plans and by learners to highlight areas of development need.
 - Feedback needs to **be related to the learning goals** set for each task. This will allow learners to use the feedback to improve. Feedback could focus on the content and quality of work, how a learner has approached a task, and/or the effectiveness of a strategy they used.
- Effective AfL involves **developing learner autonomy** so they can assess themselves accurately and regulate their own learning. In this way, it supports development of the Cambridge learner attributes.

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How is Cambridge supporting schools with assessment for learning?

- Online resources such as **Getting Started with Assessment for Learning** provide teachers with new ideas and approaches that link theoretical understanding with practical classroom application.
- Training such as our Enrichment face-to-face and online workshops on active learning and assessment for learning provides the opportunity for teachers to develop these practices further.
- **Cambridge Professional Development Qualifications** have been designed to encourage and support the use of assessment for learning.
- **Cambridge Primary and Lower Secondary programmes** are specifically designed to help learners and teachers to make and assess progress and provide feedback on strengths and weaknesses across a range of subjects.

Where can you find more information?

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- Education Endowment Foundation (EEF). (2014). **Neuroscience and education: A review of educational interventions and approaches informed by neuroscience**. London: EEF. Available online at: <https://educationendowmentfoundation.org.uk/evidence-summaries/evidence-reviews/education-and-neuroscience/>
- Education Endowment Foundation (EEF). (2016). **A marked improvement? A review of the evidence on written marking**. London: EEF. Available online at: <https://educationendowmentfoundation.org.uk/evidence-summaries/on-marking/>
- Gardner, J. (2012). **Assessment and Learning** (2nd Edn). London: SAGE Publications Ltd.
- Hattie, J. (2012). **Visible Learning for teachers**. Abingdon, UK: Routledge.
- Hattie, J. and Clarke, S. (2019). **Visible learning: Feedback**. Abingdon, UK: Routledge.
- Swaffield, S. (2008). **Unlocking assessment: Understanding for reflection and application**. London: Routledge.
- Swaffield, S. (2011). Getting to the heart of authentic Assessment for Learning, **Assessment in Education: Principles, Policy and Practice**, 18(4) 433–449.
- Wiliam, D. (2016). **Leadership for teacher learning**. Palm Beach, FL: Learning Sciences International.
- Wiliam, D. (2018). **Embedded formative assessment** (2nd Edn). Bloomington, IN: Solution Tree Press.
- Information on Cambridge Professional Development Qualifications can be found at: www.cambridgeinternational.org/pdq
- **Getting Started with Assessment for Learning, Getting Started with Evaluating Impact and Getting Started with Metacognition** are available on our website at: www.cambridgeinternational.org/gettingstarted

Acknowledgement: Teaching & Learning Team, Cambridge International.

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