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Edtech will always change – quickly











1

Formative assessment in the digital age

This chapter will assess how formative assessment is evolving in the digital age.

Formative assessment is also referred to as assessment for learning (or AFL). Black and Wiliam (2010) defined the term more rigorously; assessment for learning can only give way to formative assessment when the feedback provided determines the teacher's ensuing actions. Boyle and Charles (2013) identified

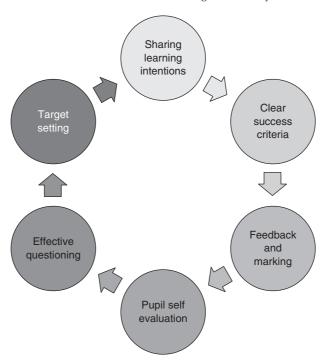


Image 1.1 Does edtech help or hinder the process of AFL?

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wide variations in teachers' definitions of formative assessment. The literature was similarly varied: Coffey et al. (2011, cited in Boyle and Charles, 2013, p8) defined formative assessment as using a genuine engagement with ideas to determine a teacher's next steps. Popham (2008, cited in Boyle and Charles, 2013) sees formative assessment as different from summative assessment in that it is designed to produce a qualitative score, not a grade.

When each chapter examines an educational technology (edtech) platform or tool, we will discuss its potential to help teachers assess. One of the enduring debates will be to what extent edtech reinforces or challenges the old methods of AFL, summarised above.

Indeed, there is considerable debate about how best to use formative assessment among a generation of 'digital natives', who have been raised using digital technologies (Prensky, 2001). According to Blink (2015), edtech tools are more likely to be successful if teachers learn how to use the data to enable progression, which would require ongoing training (Higgins et al., 2011; Passey, 2014).

Indeed, Prensky (2010) argues that formative assessment is only worth the considerable effort if learners read it, think about it and act upon it (Prensky, 2010, p176). Though edtech is frequently associated with distance learning, effective formative assessment still requires dialogue and feedback (William, 2011; Boyle and Charles, 2013). Black and Wiliam (2010) argued that the constant drive to grade, rank and improve is currently at the expense of useful advice and the learning function (Black and Wiliam, 2010).

Furthermore, digital technologies can open up opportunities to go beyond formative assessment. For example, 'ipsative assessment' relates to the practice of stretching and challenging learners by encouraging them to beat their personal best (Prensky, 2010, p176). Though this method is borrowed from sport, it could be adapted by edtech platforms by focusing the challenge on certain skills. The instant data generated by many edtech assessment tools could facilitate this more helpful form of analysis.

Formative assessment and policy

As summative levels were abolished as the dominant form of assessment, schools and colleges are instructed to place greater emphasis on formative assessment (McIntosh, 2015). For teachers, formative assessment is described in the *Final Report of the Commission on Assessment Without Levels* as enabling teachers to plan and evaluate their teaching in terms of establishing whether their learning is stalling or thriving (McIntosh, 2015). Under the new National Curriculum, learners must experience formative assessment on small units of work before progressing to the next (Fleming, 2012; McIntosh, 2015). The emphasis, therefore, is on deeper understanding of learners' strengths and struggles.

The endgame, therefore, is to reach 'mastery learning', which prioritises a deeper, consolidated understanding of fewer topics (Guskey, 2012, cited in McIntosh, 2015). This is a development from the notion of 'deep learning' (Entwistle, 2000, cited in Scales, 2013) and may necessitate clear communication of a lesson's 'mastery goals' at the start (Hattie, 2008). Though Ofsted recognise the importance of formative assessment, they do not dictate how much or how frequently formative assessment should take place (McIntosh, 2015).







Edtech and mastery?

Could edtech serve as a catalyst to mastery learning? Saidi (2015) argues that the subsequent summative assessment could create learner anxiety, even a broader insecurity towards their educational existence. Black and Wiliam (2010) indicated that the giving of marks and grading function are overemphasized, while the giving of useful advice and the learning function are underemphasized (cited in Saidi, 2015, p6).

In terms of the latest Government drives towards reforming how formative assessment is managed, recorded and acted upon, there is a move away from the idea of 'fixed ability' and a focus on skills, knowledge and understanding (McIntosh, 2015, pp27–28). As teachers assess without levels, there may need to be a fine balance between the availability of data and its relevance. To what extent does extensive data help children learn?

Digital dependency?

There is a tension between the need for teachers to acquire and update new skills and the fear that learners are being effectively de-skilled through their digital dependency (Gardner and Davis, 2013). Though digital natives are demonstrating advanced skills in multitasking at speed, there is a fear that the skill of metacognition – or thinking about thinking – is being atrophied or eroded. The paucity of empirical evidence from the UK in this area may suggest that more is needed if these ideas are to inform Government policy (Helsper and Eynon, 2009). Indeed, the Commission for Assessment without Levels (McIntosh, 2015), the Carter Review (Carter, 2015) and the response to the Carter Review (Morgan, 2016; Munday, 2016) made no reference at all to the changing ways in which digital natives learn. Though Ofsted and Government policy continue to have a great deal to say about formative assessment, it may be time to look more closely at how edtech can accelerate and enrich the process.

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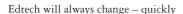
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