**The challenge of changing to an assessment for learning culture**

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*Float like a butterfly, sting like a bee.* (Muhammed Ali)

Over the last few years, there have been calls to move away from a pure reliance on high-stakes testing at the end of a period of learning (‘assessment of learning’ or AOL) towards a focus on multiple low-stakes assessments throughout the period of learning, combined with rich feedback (‘assessment for learning’ or AFL) [1,2]. This stems from a recognition that assessment can have unintended and unfortunate consequences on learning. Too often, assessments become hurdles to be overcome, rather than stepping stones to further learning [3]. Figuratively speaking there is a need to reduce the ‘sting’ of assessment (AOL) to enable students to ’float’ forward like butterflies (AFL). Achieving this is proving difficult.

In this issue, [the authors] advocate the use of progress testing as a way of removing the sting. [4] Several potential benefits of progress tests are advocated. In theory, as they cover such a broad content area, last-minute cramming should not be a helpful strategy, so deeper learning ought to take place. The low-stakes intention of each individual progress test should mitigate some of the adverse effects that high-stakes assessments can have on learning approaches. Avoiding an over-reliance on a single assessment measurement point fits in well with theories of programmatic assessment [5]. Progress tests also offer a relatively straightforward way to provide fairly detailed feedback to learners. Does the reality meet these expectations?

If implemented well, progress tests may indeed help remove the sting of assessment. But perhaps we could learn lessons from how bee stings should be extracted; the method or tool is less important than the efficiency with which the sting is removed. [6] At the risk of mixing analogies, this leads us to an ‘elephant in the room’. When theory meets reality, assessments designed with the intention of removing the sting and promoting learning may be inefficient, or even detrimental, when they are implemented in practice.

Students do not always perceive the progress test as promoting deeper learning; the wider design of the assessment programme has a critical influence [7]. Other assessments which designers intend to be low-stakes can in fact be perceived by learners to have summative consequences, with adverse effects on the learning opportunities. [8, 9] From the students’ perspective, assessment often remains firmly rooted in the summative tradition.

In addition, students, although always vocal in their demand for feedback, appear to have difficulty in using it formatively. Simply providing feedback after assessment does not ensure that learners will use it in the way which programme designers intended. In one example feedback was delivered via a website to all students following an objective structured clinical examination (OSCE) [10]. Although almost all students viewed the website, there was considerable variation in how they used the feedback. Highly performing students tended to use the website feedback for competitive comparison of performance rather than formatively whereas the just-passing students (who needed it most) tended to ignore it as they had managed to clear an assessment hurdle. Further work demonstrated that summative assessments created a powerful culture which was dominated by students’ fear of failure and subsequent punishment [3]. The feedback provided after a summative assessment was not regarded as relevant for future learning in the clinical workplace, but was only seen as appropriate for future summative assessments.

Faculty can also hinder the process. Introducing additional tests alongside the progress test to meet traditional expectations of summative knowledge tests can undermine AFL intentions [7]. At the same time interactions with teachers can reinforce the need to avoid failure and paradoxically focus more attention on students who fail rather than on those who pass assessments.[3] Tutors find the process of giving effective feedback challenging and complex. They fear being perceived as unkind to learners and struggle with conflicting aims of improving learners’ future performance and building their confidence [11]. It appears very hard to combine the roles of assessor and mentor.

This leads us to some uncomfortable truths. Despite our best intentions, assessments designed as low-stakes may be perceived as high-stakes. If an assessment is perceived as summative, either by design or implementation, receptivity to feedback is hindered, as the information from the assessment has been unintentionally boiled down to a binary pass-fail decision, which becomes the dominant message.

How then can we ensure that assessments have beneficial effects on learning? As well as considering the individual being assessed or receiving feedback, we need to consider the broader environment and culture in which assessment and feedback take place. If we want our students to make full use of the learning opportunities which assessments present, we need to be prepared to challenge the prevailing assessment culture. In addition to encouraging receptivity to feedback, unintended adverse consequences of competency-based assessments must be avoided and authentic linkage of assessment to practice created [12]. Changing the culture will not be easy. Although designers of assessment programmes may be attracted by the theoretical concepts of assessment for learning, they may be hesitant to proceed with a radical change of assessment culture because of the reported difficulties in implementation. They will also recall that, within medical education, implementation of previous innovations has not always been straightforward. It may therefore be helpful for advocates of change within medical education to consider the evidence which underpins, or hinders, successful culture change in other fields.

These challenges should not deter us from using progress tests in our assessment toolbox. As [the authors] propose, they have great potential. But instead of focussing on the merits of the tool itself, we need to move to understanding how to implement progress tests, and other assessments, successfully within a broader assessment for learning culture. The scale of this challenge should not be underestimated. In essence it requires a commitment from faculty to create a learning environment free from the restraints of traditional assessment design. Students should be empowered to take charge of their own formative assessment pathway and offered supportive mentorship. In this environment the progress test should flourish. To return to our analogy: students can then float as butterflies and faculty can return to their bee hives released from the need to sting.

Pull-out statements:

* Too often, assessments become hurdles to be overcome, rather than stepping stones to further learning.
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* If an assessment is perceived as summative, either by design or implementation, receptivity to feedback is hindered.
* We need to consider the broader environment and culture in which assessment and feedback take place.

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