E-assessment: how can we support tutors with their marking of electronically submitted assignments?

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item and marked online by markers working on computers at home or in marking centres, with marks then being collected and checked electronically. This reduces the arithmetical errors inevitably involved in mark collection. It also has many other benefits, not least reducing the need for scripts to be physically transported back and forth to examiners, considerably reducing the scope for loss or misdelivery and also thereby saving process time and the environment. It further allows real time monitoring of marking for both accuracy and speed and permits standardisation to be carried out, if desired, online – useful both for small subjects and those with more straightforward mark schemes. A further benefit is that it makes possible the random allocation of scripts and indeed of items within scripts thus eliminating a potential source of marker bias.

This is therefore, all very much work in progress, a transformation which, importantly, is happening on an incremental basis, so that it will be many years, if ever, before pen and paper exams are entirely banished. This incremental development, dictated to some extent by the speed with which different applications of the technology can be developed, is also important because it allows a body of experience to develop before the implementation of wide scale changes, essential if the full assessment and other implementation of wide scale changes, essential if the full assessment and other implications of all the new technology has to offer for example responses to new types of stimulus material, are to be properly understood.

The technology to achieve this is highly complex and has entailed huge investments by Cambridge Assessment and UK Awarding Bodies. It introduces the possibility, once it is properly established and fully embedded, of making significant process improvements which should in turn result in efficiency savings, but these will need to be set against the tens of millions of pounds of up front investment. The prime driver, therefore, has been to improve quality assurance and improve the accuracy and security of marking, essential at a time of such extensive public scrutiny of Awarding Bodies and their activity.

Of course, in undertaking this venture, Cambridge Assessment is going back to the original purpose for which it was founded, namely the developing and making available to schools exams that help promote high educational standards. There are multiple challenges it faces in doing so and I hope this article has given a flavour of what these are, and in particular the way in which assessment interacts closely with technological and social factors, seeking to set consistent and accepted standards whilst being responsive to changes in the overall environment. This is a difficult balance to maintain, especially in a time of major policy turbulence in education. Cambridge Assessment’s wholehearted ethical commitment to using assessment to support learning should, however, enable it to continue to succeed, a positive expression of the University’s commitment to the community manifesting itself in a direct and practical way that allows it to influence positively the lives of millions each year through the provision of widely available, world class qualifications.

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How does Open Mentor work?
To provide an appropriate mentoring framework, Open Mentor is based on Bales’ (1970) interactional categories, which provide four main categories of interaction: positive reactions, negative reactions, questions, and answers. These interactional categories illustrate the balance of socio-emotional comments that support the student. We found that tutors use different types of questions in different ways, both to stimulate reflection, and to point out, in a supportive way, that there are problems with parts of an essay. These results showed that about half of Bales’s interaction categories strongly correlated with grade of assessment in different ways, while others were rarely used in feedback to learners. This evidence of systematic connections between different types of tutor comments and level of attainment in assessment was the platform for the current work.

The advantage of the Bales model is that it has proven successful in all of them. An automatic classification system, therefore, can be used in all fields, without needing a new set of example comments and training for each different discipline. Others (e.g., Brown & Glover, 2006) have looked at a range of different classification systems, including Bales, and from these developed their own to bring out additional aspects of the tutor feedback, bringing back elements of the domain. In practice, no (useful) classification system can incorporate all comments. We selected, and still prefer, Bales because of its relative simplicity, its intuitive grasp by both students and tutors, and because it brings out the socio-emotive aspects of the dialogue, which is one aspect tutors are often unaware of.
ensure that it provides the emotional support as well as the conceptual guidance that our learners need. Tutors are provided with simple visual displays of their use of feedback, like that shown in Figure 1 above. Finally, using open source software makes the tool easier to adapt to different institutions’ and individuals’ needs than any off the shelf product.

Future Work
Assessment is a far more widespread issue than we had realised, and since starting work in this area, we found many other potential applications for this technology. These include:

- Providing students with formative feedback on their assessments, with feedback properly adjusted to the students’ needs
- Supporting the review process in academic conferences and competitive project proposals
- Automated generation of high quality reports (both in content and in presentation) based on complex data

Technology to enhance assessment is still in its early days, but the problems are not technical: assessment raises far wider social issues, and technologists have struggled in the past to resolve these issues with the respect they deserve. E-Assessment is starting to deliver potential improvements; but there is still much work to be done.

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References