What’s new in e-assessment? from computer-marking to innovative item types

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**Additional Information:**
- This is the abstract of a conference paper

**Metadata Record:** [https://dspace.lboro.ac.uk/2134/4487](https://dspace.lboro.ac.uk/2134/4487)

**Version:** Published

**Publisher:** © Loughborough University

Please cite the published version.
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WHAT’S NEW IN E-ASSESSMENT?
FROM COMPUTER-MARKING TO INNOVATIVE ITEM TYPES

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What’s New in e-Assessment?
From Computer-Marking to Innovative Item Types

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Abstract

This session will be a brief exploration of the potential for more interactive and innovative item types in e-Assessment. Topics for discussion will include; how new simulations are being used by the medical profession; electronic marking of essays; and human marking of long answer questions. Whether you are already using e-Assessment and are looking for ways to innovate, or you are thinking of moving to e-Assessment and you would like to see what is possible, this session should have something for everyone.

Computer-Based Testing (CBT) has, believe it or not, been around since 1979. The prevalence for CBT started in the US with early adopters realising its benefits, such as Microsoft and Cisco in the I.T. market. CBT has since spread across the globe to encompass wider markets such as financial services, medicine and education. Here in the UK, it has seen growth within many bodies with a regulatory, licensure or academic basis. They utilise CBT as one form of a variety of assessment types to qualify and accredit their candidates and this number is on the increase year-on-year. A recent UK survey of more than 100 professional bodies found that two thirds had moved to CBT during the past two years – and that 63% expect a ‘significant’ increase in e-Assessment over the next five years*.

So what is e-Assessment? It is the use of computer technology to present, record and mark responses to a test. Anyone taking a Computer-Based Test parks their pen and paper at the door and picks up a mouse instead. That said CBT isn’t just about transferring paper-based questions onto a computer; it’s more about harnessing a new way of testing that provides instant results, detailed feedback and an increase in the variety of item types.

Multiple Choice Questions (MCQs) have long been the preferred and statistically stable option when using CBT, but in this age of electronic innovations organisations are pushing the boundaries of what is possible in e-Assessment. Outside of what may be considered standard item types, e.g. MCQs, multiple-response, ordered lists, drag and drop etc the testing and assessment sector is seeing a greater interest adopting more sophisticated

* A study of the use of e-Assessment by Professional Bodies, © 2007 Pearson VUE Ltd., FreshMinds Ltd.
technologies to create item types such as simulations, video clips and 3-D modelling.

So how useful are these item types and how much more can you achieve from an exam utilising these item types? Could expensive and time consuming ‘practical’ exams perhaps become a thing of the past?

In addition to the new and innovative item types, increasingly companies are looking to move their essay-based items over to computer. The benefits of this are huge as more and more candidates are used to learning and working with a keyboard rather than pen-and-paper. The benefits for markers is that the handwriting barrier no longer poses a problem and making assumptions and judgements on what the candidate ‘may’ have written, disappears.

An even greater benefit for these items is the potential to utilise an electronic human marking system giving you the ability to track and monitor your markers in real-time. This can give a greater consistency across grading and a rapid response and correction facility when a marker is going ‘off track’. This can save an enormous amount of time re-grading at the end of a paper based marking event. Even with all of these benefits though how will the marker perceive the tool? Is it something that aids their marking processes or hinders them?

Alternatively machine-marking of essays is an option slowly increasing in prevalence, although with some caution. How effectively can a machine mark compared to a human? How much effort is involved in training the machine to mark to your specific criteria and over how many essay titles?

This presentation will take a brief look at some of the exciting item types being used in live testing and discuss the potential benefits of the results and examinations in this form. It will ask questions of you and encourage you to consider whether your own testing programme requires new item types, or if MCQ or essay-based exams are adequate to cover your syllabus, and indeed, if your organisation is using essay-type items then would there be scope to introduce computer-based marking?