Establishing high stakes computer-based testing through Blackboard as a supported service: an institutional perspective on challenges and lessons learned

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Abstract
This presentation reflects on the iterative design process which we have adopted to establish a centrally supported high stakes computer-based assessment service for short-answer and defined response testing at the University of York. Our approach followed principles similar to those described by Zakrzewski and Steven (2003) in their implementation model for computer-based assessment, focusing on cycles of development in our technical support and assistance to academic staff – enabling us to experiment with formative tests before rolling out an environment suitable for high stakes testing.

We will report on the technical challenges that we have faced along the way in configuring the test environment and managing a locked-down desktop service – encountering a number of setbacks in using QMP software (locally managed and on demand varieties) before arriving at a robust solution through the creation of a separate instance of our institutional Blackboard Learn environment as the examination platform, based on the use of the native assessment engine.

We will address the lessons that we have learned on exam design and how this has informed our practice – specifically the guidance we now provide to academic staff on the composition of question-sets and proportion of short answer (open) to multiple choice question items. This has been derived from the setbacks that we have previously faced in system performance when cohorts have simultaneously submitted high volumes of open responses through Blackboard’s assessment engine.

We will also discuss security measures in coordinating testing across multiple venues for large cohorts and the specific steps that we have introduced to overcome the limitations of the physical estate and absence of dedicated test venues on campus to accommodate large cohorts.

The presentation will also touch on the institutional challenges in identifying and implementing exam protocols, coordinating the contributions of key stakeholders such as academic and IT support staff in the preparation of the exam environment. We will also reflect on our on-going challenges, such as effective collaboration with the Exams Office in adapting invigilation procedures from paper-based to on-line exams to support the centrally managed exam service. This presentation will invite a broader discussion on the challenges of managing a high stakes computer-based testing service – looking at both technical issues and the human dimension in establishing effective policy and support procedures.