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USING MULTIPLE CHOICE QUESTIONNAIRES FOR FORMATIVE ASSESSMENT

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KEYWORDS

Formative assessment, MCQs,

SUMMARY

Students on the *Introduction to Psychology* module have been using Multiple Choice Questionnaires (MCQs) administered through the Blackboard VLE for both formative and summative assessment. Using the formative assessment as a 'dry run' for the summative assessment has reduced students' anxiety levels.

There is an initial time investment in setting up the questionnaires. However, as answers and feedback are generated automatically in the VLE, this investment is repaid with a subsequent reduction in marking time. The MCQs also require students to revise all of the material they have learned, resulting in increased understanding and engagement with module material.

CONTEXT

Introduction to Psychology is a level 7 module taken by students on a variety of programmes from within the Social Sciences scheme (Social Sciences BA, BA Child and Youth Studies, BA Health Studies) as well as students taking the module as an elective. It is taught entirely through the Blackboard VLE with a staff team from three academic partners. The module was introduced along with the Psychology degree in 2011-12 and ran for the second time in 2012-13.

WHAT, WHERE?

The module is assessed through one essay and a multiple choice questionnaire (MCQ) which is available on the VLE for a 48 hour period. Two pieces of formative assessment are used to prepare students for these: For the first, students are asked to create three multiple choice questions of their own; the second consists of a practice version of the MCQ which allows students to familiarise themselves with the online interface and to remedy any technological issues.

WHY?

During the first year in which the module ran a significant number of students failed to complete the MCQ portion of the assessment which led to a (misleading) high failure rate. This was partly due to technology; many students would be unable to access the MCQ because of problems with Wi-Fi, browser incompatibility etc. but significantly due to anxiety amongst students who were new to both online learning and MCQs. The decision to use a practice MCQ as a piece of formative assessment resulted in improved attainment rates for the summative MCQ and also reduced student anxiety levels considerably. In addition the large number of students taking this module meant that using the VLE for part of the assessment lightened the marking load considerably without reducing the amount and quality of feedback that students received.

HOW?

Practice multiple choice questions are submitted in week 3, the practice MCQ runs in week 5 and the summative MCQ in week 7. Each MCQ has 30 questions. After the questions have been written it takes around three hours initially to create a questionnaire on the VLE (part of 'course tools'): creation of subsequent questionnaires takes less time as the processes become more familiar, and as a pool of questions is amassed.

DID IT WORK?

Yes! Over 80 students of the 113 enrolled in 2012-13 sat the practice MCQ and only 2 students failed to meet the 40% pass mark. The summative MCQ was subsequently completed by the overwhelming majority of students (only 13 out of 113 students failed to complete it) which was a vast improvement on the previous year.

WAS IT WORTH IT?

The initial time investment it takes to set up an MCQ in Blackboard has been well worth it in terms of time saved later not having to mark assessments. Blackboard has features which enable to user to populate feedback fields which are displayed to the student after they have submitted their answers (the content of these fields is determined by whether a correct or incorrect answer was submitted, and there are different options for how results are viewed e.g. listing the answers the student submitted, listing the correct answers, displaying individual feedback on each question.) Over time, using MCQs will reduce workload further as the pool of questions gets larger and it becomes possible to reuse questions.

In terms of student learning, I feel that the additional task of creating multiple choice questions has helped students to understand the nature of MCQs and also resulted in them having to revise the whole curriculum, and so generally deepened the level of students' engagement with the module material. The fact that Blackboard randomizes the order of the questions and answers makes student to student copying difficult, so the assessment genuinely tests students' grasp of the learning material.

FURTHER INFORMATION

Learn about using MCQs at: Blackboard Help > Help for Instructors > Tests, Surveys and Pools (available from the left hand menu on any Blackboard module/unit page)

If you wish to submit your own case study, or have any questions about this resource please contact:
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