



CAMBRIDGE ASSESSMENT

## **An investigation into the impact of item format on computer-based assessments.**

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### **Abstract**

In this study aspects of item format in a computer-based assessment (CBA) were investigated to see whether they affect the difficulty of the test items. A mixed-methods approach was used: a quantitative strand examined statistical measures of item difficulty and a qualitative strand gathered student perceptions of item difficulty. Parallel forms of a computer-based assessment were administered to 112 students; items in the second parallel form contained modifications of the item format. Difficulty measures of each test item were calculated from the sample and tested for significant differences. In addition, two focus groups of students were used to build up insights into their perceptions of how the item format impacted the difficulty of the items. The study identified that difficulty measures of all the items were very similar in their alternative forms. The focus groups revealed that students were able to readily articulate perceived sources of difficulty.

