

Framework for evaluating online assessment in business education: Trade-offs in promoting innovation

Authors: **Dr Andrew Cram, Dr Sandris Zeivots, Corina Radulescu**
The University of Sydney Business School

Introduction

Prior to 2020 online teaching, learning and assessment comprised a minority of higher education delivery in Australia for reasons including visa conditions for onshore international students that restricted online delivery to one-third of teaching in a course (NCPPETOS, 2018), expectations of professional accrediting bodies regarding invigilated assessment and concerns about academic integrity with online delivery (e.g. Holden et al., 2021). These factors were particularly important in business disciplines where international students comprised a large proportion of enrolments and where many disciplines have professional accreditation (e.g. accounting).

Purpose

In the context of the rapid transition to fully online teaching and learning driven by COVID-19 (Ali, 2020), the Australian Business Deans Council commissioned a research project into online assessment in higher education in Australia. The aim of the project was two-fold: 1) to understand the types of online assessment in use in Australian business education (see Cram et al., 2022 for details); and 2) to develop a framework of key design considerations for educators to use for evaluating online assessments. The cross-institutional team, consisting of members from the University of Sydney Business School, UTS Business School and Chartered Accountants ANZ, designed and implemented the research project.

Framework

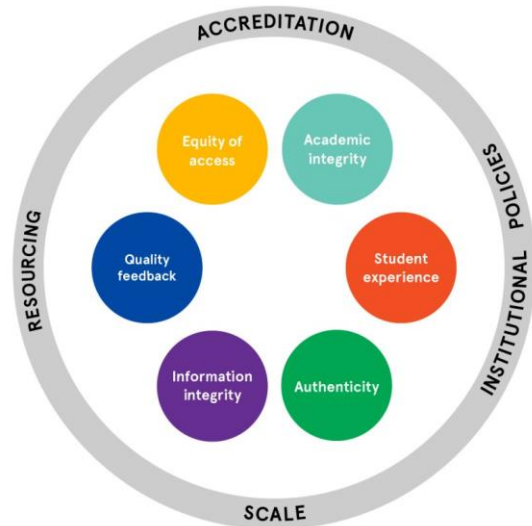
We based our investigations on five design considerations for quality online assessments: the assessments should (1) ensure academic integrity, (2) allow for the provision of quality feedback, (3) support a positive learning experience for students, (4) assure the integrity of student information, and (5) support an equal chance for students to complete the assessment successfully. From the findings of the study, we added a sixth design consideration, that of authenticity. In addition, the framework was originally developed with two broader contextual factors that mediate assessment design: resourcing and scale. We added two further contextual factors based on the study findings: accreditation and institutional policies (See Figure 1).

Method

Using input from a comprehensive literature review on online assessment (Brodzeli, 2022), we engaged key stakeholders throughout the process to assist dissemination of findings (Gannaway et al., 2013). We collected 92 survey responses from university staff at Australian institutions to identify and categorise their online assessment practices and

evaluate these against our framework. We then held four focus groups with 19 participants to further explore online assessment practices, barriers to innovation, and refine the evaluation framework.

Figure 1: Framework for evaluating online assessment



Findings

Current online assessment practices

We analysed the survey data using descriptive and inferential statistics and the focus group data using thematic analysis (Clarke et al., 2015). The most prevalent forms of online assessment being used were traditional written reports (91% of respondents) and exams and quizzes (86%). Less prevalent were performative or reflective assessments, such as live (53%) or recorded (50%) presentations, reflective journals (28%) and creative works (8%) (Figure 2).

Out of 12 criteria, respondents ranked academic integrity, mastering learning outcomes, equity of access and quality feedback as most important to online assessment decisions. Criteria such as working within resource constraints and aligning with institutional assessment culture were ranked as least important (Figure 3).

Discussion

Making trade-offs in assessment design and innovation

Focus group findings suggested that many academics perceive resource constraints as the most important institutional driver of decisions about online assessment design. This has a direct impact on the capacity for assessment innovation, particularly with large student cohorts. We synthesised the focus group discussion into a series of trade-offs (see Huber et al., 2022 for more detail). For example, academics expressed their concerns regarding the lack of invigilation and identity verification in the online environment and its ability to ensure the integrity of online content. Most participants related to assessments where students present material synchronously (e.g., exam or live presentation) but said there was

a trade-off in relation to the student experience. Internet access, interaction with web-based tools, and the impact of time zones on group work were examples of trade-offs between equity of access and student experience. Some academics emphasised the importance of students practising with easily and universally accessible tools. Another example of a trade-off involved the requirement to use authentic assessment, which may involve a performance-based design (or demonstration of a skill) and an institutional policy mandating anonymous marking.

Another consideration that emerged in our focus groups was the stress experienced by academic staff in relation to online assessment and workload. Focus group participants raised a range of issues about the ways in which online assessment requirements may be inconsistent with meeting the needs of learners. These concerns were exacerbated by the work environment where job security was not assured. Such concerns cannot be alleviated through assessment design advice and require independent investigation.

Invigilation and accreditation: Key considerations in Business education

We were also interested in invigilation practices operating in the online environment. We noted a common misconception in relation to accreditation requirements. The Certified Practising Accountant (CPA), for example, say “the Professional Bodies’ expectation is that at least 50 per cent of the overall assessment marks for each subject meeting the professional bodies’ required competency areas, should be invigilated, which means that a student’s identity is confirmed, and they are observed when completing assessment activities” (CPA Australia, n.d.). Many educators interpret this as a requirement for an invigilated exam, and with the shift to online, a proctored online exam was frequently selected. Participants indicated that decisions about invigilation could be difficult due to a perceived trade-off between concerns about academic integrity and privacy of student data. It was unclear from our findings whether leadership was being enacted in this regard and how decisions were made. We hope this study will provide evidence and examples for academics to consider ‘performance’ types of assessment as alternatives to invigilated online exams.

Using the Framework

The results from the survey and focus group discussions led us to extend our initial five design considerations to include authenticity, and to extend our initial two contextual factors to include institution policies and accreditation requirements.

We envisage this framework can be used in multiple ways:

- To evaluate existing assessments, for an individual unit by the coordinator, or for a course or program as part of a general review of assessment design.
- To document assessment practices and trade-offs between design considerations. This may prompt conversations about the trade-offs inherent in assessment design, and the pressures that exist in certain contexts.
- To design new online assessments or redesign existing ones. A proposed change to assessment can use the framework to guide and demonstrate the reasons for, or impact of, the change.

The focus groups highlighted the importance of identifying and sharing innovative assessment solutions. We have created an online portal to share our collected exemplars and framework and to provide a forum for academics to actively engage with the findings. We strongly encourage practitioners to submit their innovative assessments through our portal (www.bisonlineassessment.com/?page_id=247) and use the findings from this study to progress institutional conversations of quality online assessment design.

Limitations and Future Directions

Our findings are limited by the absence of the student voice in an investigation of assessment design where students are fundamentally involved in the assessment process. Future research in this area should prioritise incorporating the student voice. Unpacking the distinctions between individual and group assessment is an additional aspect worth of future investigation with both students and academics.

We also consider exploring the applicability of the framework outside business education. Continuing our research with other disciplines, such as engineering, could be a good starting point for unpacking the similarities and differences of online assessment, innovation, and accreditation's impact. This is a first step towards the development of a cross-disciplinary framework for evaluating quality online assessments.

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