Chapter 2

eLearning Assessments, Issues, Mitigation Strategies, and the Future

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ABSTRACT

eLearning continues to offer the promise of revolutionizing education. Lower cost of education, learning anywhere, and personalized learning are just a few benefits of eLearning. The COVID-19 pandemic exacerbated the need for technology-mediated learning. eLearning assessments continue to be an open challenge in the context of eLearning. Both novice and experienced teachers grapple with assessing learners in online classes. Issues such as the nature of assessments, exam integrity, use of appropriate assessment tools are now getting increased attention from researchers. Existing research in eLearning tends to focus on the technology, its adoption, and factors affecting its success or lack of it. A paucity of research on e-assessments leads to limited insights for teachers and institutions. Consequently, this chapter focuses on e-assessments, given the critical role of assessment in any form of learning.

INTRODUCTION

The continued infiltration of ICT into every aspect of human life has given rise to new areas that hold key promise for the next generation. Among these areas is eLearning, a form of learning mediated through technology. eLearning has been adopted in different formats, principally eLearning (fully online learning) and blended learning. The two pedagogies have increased the proliferation of all forms of technology-mediated learning.

eLearning is lauded for its incredible benefits, key among them being its ability to make learning available anywhere at any time; cutting the cost of education; adaptability to learners' different learning styles, and ability to scale up without significant high infrastructural costs. Even with the low-hanging benefits, Higher Education Institutions (HEIs) have only adopted eLearning with moderate success.

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Although initially adopted by learning institutions as a strategy for reaching markets far beyond the physical presence of universities, the current pandemic – COVID-19, has exacerbated the need for technology-mediated learning for continuity in times like the current period.

Central to any form of learning is assessment. Assessments are broadly viewed as either "assessment for learning" (formative assessment) or "assessment of learning" (summative assessment). In the context of online learning, assessments vary depending on the technology available and the adopted pedagogy for learning (Falkner et al., 2020). Summative assessments come at the end of a learning period to measure and test how much a learner has learnt. Formative assessments are given during learning for two major reasons; first, they give the learner many opportunities to learn and improve. Secondly, teachers use the feedback of formative assessments to improve or adapt their teaching styles to what can benefit the learner. eLearning assessment tools can significantly enhance formative learning given their autograding and instant feedback capabilities.

eLearning assessments have significant benefits. These include automatic grading and the ability to be administered to many learners. Other benefits are e-assessments' ability to generate interactive, timely and personalized feedback (BULUT et al., 2020).

Multiplicities of grey areas exist in e-assessments. The development and grading of online assessments can be taxing. The adequacy of the assessments remains to be an issue. Assessments should not only measure what the students know or do not know, but according to (Nightingale et al., 1997), assessments need to also focus on 21st-century skills such as problem-solving, high order thinking, critical thinking, team building, and communication skills.

In most institutions, academic guidelines seem only to address essays and handwritten exams to the periphery of other assessments, such as online assessments, presentations, computer programs, and music presentations (Sheard, 2016).

Many teachers grapple with enforcing academic integrity for online assessments, designing and administering adequate and appropriate online assessments. Further, teachers need to appreciate the digital tools eLearning offers to assess learners. The general direction and technological direction of e-assessments are also crucial to the teachers. Unless these areas are clear, there are severe limitations to the adoption of eLearning. To this end, the purpose of this research is fourfold.

- 1. Review common types of eLearning assessments tools.
- 2. Use a case study to explore the utilization of assessment tools by HEIs.
- 3. Tease out common challenges of online assessments and their possible mitigation strategies and
- 4. Survey innovative online assessments.

In order to address these chapter objectives, the rest of the chapter is organized as follows; first, a background section that explores research activities and literature reviews related to e-assessment is presented. A comprehensive overview of common assessment tools in Moodle LMS is then discussed. After this, a case study is given to investigate the utilization of the different higher learning institutions.

The fourth focal point of the chapter looks at common issues and challenges of eLearning assessments. Mitigation strategies for the identified problems are discussed in this section. We then present a section that identifies some innovative e-assessment strategies different teachers employ. Immediately after, we reflect on the future of e-assessments before the last section - the conclusion section, which focuses on the crystallization of key highlights of the chapter. The conclusion section also makes recommendations for HEIs.

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