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Utilizing Online Quiz Assessment Tool to Provide Timely, Guided Feedback During COVID-19 Pandemic

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ABSTRACT

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The provision of timely feedback with useful guidance towards the correct solution is very important within the learning process of higher education students. This paper describes an implementation of timely feedback in a 3rd year electrical engineering undergraduate course, Communication Principles (SKEE 3533) that was carried out during COVID-19 pandemic. Given the substantial depth of this course syllabus, it is important that students receive sufficient feedback on their understandings on current topic before moving to the next. The implementation of this assessment technique is carried out using online quiz assessment through Google quiz platform. Two types of guided explanation are given in the feedback: text explanation for simple, conceptual based questions, and video explanation for design and calculation-based questions. For the latter, YouTube platform is used to perform the video-based explanation. Study on student feedbacks was carried out using a routine, official university's survey while the impact on student performances was analysed based on their acquired grades in the SKEE3533 course. Findings demonstrate positive outcomes from the routine university survey and course grades which revealed the method's potential in improving student satisfactions and performances on the assessment aspect of teaching component.

1. Introduction

The unprecedented COVID-19 pandemic has imposed a dramatic shift on how universities around the world function. Although online learning was not new to the university community, its adoption prior to the outbreak was still low [1]. However, as teaching and learning (T&L) still needs to resume despite the ongoing pandemic, all parties had to quickly adapt with the entirely new online T&L norm.

Given the nature of online education which physically separate students from their peers and lecturers, it is claimed that the importance of online assessment in this current higher education environment is even more prevalent [2,3]. A timely feedback in particular, is very valuable where research has revealed that learnings will be more effective if students are given feedback sooner upon submitting their work [4,5].

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