Developing technologically-minded academics in online formative assessment through a community of practice

By

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Abstract

The advent of Covid-19 and digital transformations led to a shift from contact to full online teaching, learning and assessment. This study sought to develop technologically-minded academics in synchronous formative assessment through a community of practice at a South African university. Virtual collaborative meetings were held amongst the Education faculty staff in order to upskill one another in the dynamics of online assessment. Participants shared with others and demonstrated the initiatives that they were doing in their respective disciplines. The findings revealed that the community of practice was effective to enrich the academics in designing and creating online formative assessment tasks. Moreover, they had positive perceptions to online assessment upon realising that online assessment has a special place in higher education.

Introduction

The advent of Covid-19 and digital transformations caused a shift online learning and teaching. The shift to online learning and teaching in higher education was fairly quick and successful (Camilleri, 2021; Tatira & Kariyana, 2022). However, the virtual migration was not just about our teaching and learning processes. Academics soon realised that they had to assess students too. Assessment in higher education has high stakes since it is focused on learning and reporting of achievement. Academics were expected to engage online assessment but with scant resources and training. However, to design, create and deploy Blackboard assessment, substantial ICT skills were of necessity. Consequently, resistance and challenges to the successful transition from contact to fully virtually assessment were not uncommon.

Assessment consists of summative and formative, which represents assessment of learning and assessment for learning respectively. With summative, most institutions like WSU made a bold decision to proclaim that they should be exclusively online. However, there was no change in the assessment policy at WSU. As a result, some

lecturers still resorted to the traditional assessment procedures due to limited digital skills. To the lecturers who have adopted online formative assessment (OFA), its use was intermittent and discretional. OFA served to familiarise students to how the final online examination was to be (Ali & Al Dmour, 2021). This gave students the much-needed preparation and indication of the oncoming final examination. Hence, the purpose of this TAU project was to foster academics to accept and optimally use the Learning Management Systems (LMSs) OFA in their courses as a complement to online teaching. This was be achieved by means of a community of practice, where education lecturers regularly met, deliberated and shared experiences. The purpose of this project was to foster usage and growth of LMS OFA in higher education through a community of practice. OFA has not received enough attention in the Education faculty at Walter Sisulu University. Knowledge gained from this project has the potential to guide and inform OFA design and implementation, and at the same time contribute to an improvement of online education in higher education.

This project was aimed at all willing lecturers in the education faculty who were using and not using OFA. Those lecturers who were currently using Blackboard online assessment shared and furthered their experiences in the collaborative sessions so as to encourage those who had not started and hesitant. To achieve best practices in OFA in higher education in the Covid-19 era, I will turn to the theoretical underpinnings of communities of practice (COP) by Wenger (1998). COP is defined as a "learning partnership among people who find it useful to learn from and with each other about a particular domain. They use each other's experience of practice as a learning resource" (Wenger, Trayner & de Laat, 2011, p. 9). COP is underpinned by three principles, namely, the community, the domain and the practice. Education lecturers form the community of university lecturers, and the practice of teaching and assessing at university using digital resources. The domain for this project is OFA to be specific. I used the LMS virtual meetings to examine the ways in which the three components of the COP framework interplay in OFA environments. The COP framework does not specify the duration for collegial interactions, hence some projects may take a few weeks, some a few months whilst others a few years (Smith, Hayes & Shea, 2017).

Methods and materials

This project involved two groups of lecturers from the Education faculty: those who engaged in e-assessment and those who did not but display interest in doing so. These converged virtually monthly on selected dates to deliberate on embracing and creating effective OFA tasks in higher education over the period of my TAU fellowship. We managed to conduct three sessions as a COP and the fourth event was my presentation in an institution-organised Indaba on online assessment. Chiefly, we devised a collaborative strategy, document it and make reflections of it along the way. The COP theoretical framework was used to interpret the lecturers' reflections and elaborate on the implications to higher education in South Africa. This project focused on the Blackboard LMS, to be followed by a shift to Moodle in 2022 and beyond. I conducted one-to-one interviews with the academics who took part in the project as part of project evaluation, whose results were analysed as part of determining any change in practice and possible effectiveness in OFA administration.

Findings

The community of practice was effective to enrich the academics in designing and creating e-assessment tasks. The young academics took a leading role to display and encourage others in issues pertaining to online assessment. Some notable findings emerged from the deliberations that took place in the sessions. Academics' perceptions to online assessment was favourable as they realised that even in the post-Covid-19 era, online assessment has a place in higher education. In addition, academics knew the university's stance on online examinations was not going to change; hence, they took this project seriously. It was an opportunity for them to prepare for the inevitable.

Some academics indicated that they shunned online assessment based on lack of proper management of the process of assessment. Students tend to assist each even though it will be a test. They take advantage that they will never be caught since it is written online. Moreover, in most cases they get away with it. Online assessments hence do not reflect the real knowledge and skills of the students in this regards, was the comment from one academic. They resorted to take-home assignments that are traditional assessment strategies. However, the final examination was not to be a take-home assignment, so something was supposed to be done. One academic reported

that academics need a system that allow a lecturer to invigilate even if the tasks are to be written online (if possible).

Mathematics and related subjects called for better software for mathematics assessment that do not just focus on the final answer only. Mathematics has special symbols that are not easy to type using the standard QWERTY keyboard. It also is composed of multi-step solutions that are not easy to do and show on the LMS. At that point I demonstrated how I did my mathematics assessments in real-time to take into cognisance of the two aforementioned concerns. Using the assignment assessment mode on the LMS, my students would write tests as a long questions whose responses were written down using pen-and-paper. Thereafter, students scanned their solutions and uploaded them onto the LMS before the expiration of the test. Marking thereof was conveniently done in-line using digital tools. Consequently, a Physical Sciences lecturer opted to assess her students in the same format. Many more ideas came from the participants on how best to grade hand-written students scripts that have been converted to PDF. A lecturer from the Foundation Phase pointed that students' work in PDF format can be graded using the FILL & SIGN function on the Acrobat reader. Most of us conveniently used this feature for the final examination.

Nevertheless, after intense deliberation, there were some aspects of assessment that we could not resolve. Chief among these was the lack of means to assess practical work in the natural sciences and music. Further, work integrated learning could not be achieved in online assessment.

Conclusion

The findings revealed that the COP was effective to enrich the academics in designing and creating assessment tasks. Moreover, their perceptions to online assessment was favourable as they realised that even in the post-Covid-19 era, online assessment has a place in higher education.

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