Student Responses to an ICT-Based E-Assessment Application for the Teaching Practicum/Teaching Practice MODULE

M. Noor Davids, University of South Africa, Pretoria, South Africa

ABSTRACT

Situated within the context of Initial Teacher Education (ITE) in South Africa, this study introduces the notion of an interactive Teaching Practicum E-Assessment application: e-assessment application for the teaching practicum/Teaching Practice module to replace the current model of assessment. At present students enrolled for an Initial Teacher Education qualification have to complete a compulsory Teaching Practice module. The successful completion of the module arguably provides evidence of students’ readiness for professional practice. The assessment of the teaching practicum is often riddled with anxiety on the part of the students and conflict between students and their supervisor. Two interrelated research questions guided this study: What are students’ experiences of the current teaching practicum assessment? and What were students’ responses to the ICT-based assessment proposal? Data were collected from a sample of Teaching Practice students (N = 40) and a focus group discussion conducted with eight (8) students. Technological pedagogical content knowledge (TPCK) and critical connectivity theory provided the study with analytical and conceptual lenses. Findings are discussed in response to the research questions posed in preparation of the software development stage of the project.

KEYWORDS

Connectivity Theory, E-Assessment, Teaching Practicum, Technological Pedagogical Content Knowledge (TPCK)

INTRODUCTION

While e-assessment is becoming increasingly popular in higher education, assessment of the teaching practicum in e-format seems to be more challenging and less prevalent. As a concept, e-assessment covers a broad range of activities in which digital technologies are used. E-assessment activities include the designing and delivery of assessment, marking by computers – or human-assisted marking by scanners and online tools – and all processes of reporting, storing and transferring of data associated with public and internal assessment (JISC, 2007, p. 6). This study proposes an ICT-based assessment solution for the teaching practicum. Current teaching practicum assessment practices have largely remained unchanged, despite rapid technological developments in e-assessment. The need for innovative and integrated e-assessment formats is not restricted to South Africa. This study heeds the call made at the European Commission’s conference to enhance technology learning, namely that e-assessment pedagogy should reflect the core competences congruent with the 21st century expectations (Redecker et al., 2012). This article points to the polemic that if teacher education does not consider the impact of current technologies and social media on the ways that student teachers
learn, the institutions of teacher education are in danger of becoming irrelevant (Burden, Aubusson, Brindley & Schuck, 2016, p. 4).

For the purpose of this study, e-assessment is understood as the deployment of an ICT application, downloadable to a mobile device as an interactive mediatory digital platform between student, supervisor and the mentor-teacher. Because teacher education is managed by higher education institutions, it is understood that the software will be compatible and adaptable to the learning management system (LMS) of these institutions. Given the variations in universities’ administrative and e-learning systems, a downloadable application that can connect to the LMS is preferred for the purpose of flexibility, simplicity and practicality.

Arguably, education students enter their studies with at least twelve years’ prior exposure to pedagogical content knowledge (Shulman, 1986, p. 4). Students also possess technological knowledge, but teachers do not always integrate it into pedagogy. Not only university students themselves, but their future learners are already moving away from the traditional methods of learning. ‘We need to move away from those old methods and introduce technology so we can attract attention of the learners, because they are techno savvy,’ was a comment made by a school principal at the launch of an e-learning system at his school (Vuk’uzenzele, 2016, p. 2). The pervasiveness of ICT in our modern living spaces has led to education being redefined and redesigned. These changes require fundamental shifts in the way in which teaching and learning takes place (Angeli & Valanides, 2009, p. 154). However, the transition to technology-integrated education has not been smooth. On the contrary, combining new technologies with effective pedagogy has become a daunting task for both: Initial Teacher Education (ITE) and in-service training institutions (Jung, 2005, p. 94). Based on a review of literature, Redecker et al. (2012) argue that the more pressing task is to transcend the testing paradigm and conceptually develop e-assessment strategies that foster the development of 21st century skills.

In addition to PCK, which comprises the dominant descriptors of the pedagogical process, technology has become part of its defining elements. However, the use of ICT in the assessment of the teaching practicum is lagging behind the rest of the industry. It can be taken for granted that students possess valuable resources that can enhance the quality of teacher education. To incorporate technology as part of a new pedagogy, the literature refers to technological pedagogical content knowledge (TPCK), which is an extension of Shulman’s pedagogical content knowledge (PCK) (Keating & Evans, 2001; Mishra & Koehler, 2006; Kramarski & Michalsky, 2010). This study recognises the potential of student teachers’ TPCK as an untapped source of knowledge that can play a transformative role during their training as future teachers.

The challenges that the teaching practicum assessment present to teacher education are well researched. The literature refers to the inequalities in assessment processes and the use of different criteria in assessment instruments (Rusznyak & Bertram, 2013, p. 29; Davids, 2015, p. 338). A critical shortcoming in the provision of teacher education is the neglect of lifelong learning in pre-service teacher education programmes. The rapid technological changes experienced in the 21st century require frequent upgrading and retraining of teachers while they maintain their jobs (Carlson & Gadio, 2002). In line with international trends (European Council, 2000), educational policy shifted from fulfilling the immediate needs of society to a long-term view incorporating ‘lifelong learning’ as an educational imperative (Pepin, 2007). According to the European Commission’s 2020 plan, the assessment of key competences emphasises not only knowledge, but also skills and attitudes in relation to the context intended as preparation for lifelong learning (European Commission, 2012). Strategically, the Council of Higher Education (CHE) incorporated lifelong learning as a graduate attribute for professional teachers in South Africa (CHE, 2010). At present, the dominant teaching practice assessment model is in need of upgrading and revision. Not only is there a lack of a common theoretical perspective that informs the assessment process, but students have complained of contradictory experiences, leaving them in a state of confusion. The development of an ICT instrument of assessment offers
Transforming Universities in the Online World
[www.igi-global.com/chapter/transforming-universities-online-world/12042?camid=4v1a](www.igi-global.com/chapter/transforming-universities-online-world/12042?camid=4v1a)

Factors Influencing the Use of Mobile Technologies in a University Environment: A Case from Latin America
[www.igi-global.com/article/factors-influencing-use-mobile-technologies/77375?camid=4v1a](www.igi-global.com/article/factors-influencing-use-mobile-technologies/77375?camid=4v1a)