

Chapter 6

Integrating Technology in the Postgraduate Certificate in Higher Education in Namibia: Is It an Effective Tool for Professional Development?

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ABSTRACT

Few studies have examined the use and impact of technology in professional development programs in higher education. The purpose of this chapter is to explore the significance of technology as a tool for professional development in a postgraduate program in higher education in Namibia. Framed in the interpretive paradigm, the study adopted a qualitative approach. Data were collected through an open-ended qualitative questionnaire distributed to participants in the first four weeks of the postgraduate program and a second time six months afterwards. The findings reveal that the use of the flipped classroom approach and the use of the reflective e-portfolio enhance the quality of teaching and learning in the delivery of the postgraduate program as well as in the participants' teaching practice.

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INTRODUCTION

During the past decade, improving the quality of teaching in higher education has become an area of concern (Biggs & Tang, 2007; Knight, Tait, & Yorke, 2006). Professional development programs, therefore, may serve as a significant tool in improving the quality of education (Creemers, Kyriakides, & Panayiotis, 2013). In the age of digitalization, professional development programs are increasingly offered fully online or are offered through blended learning, where class sessions are combined with an online component (Teräs, 2016). Several studies have explored effective professional development programs in higher education (Black & Plowright, 2010; Knight et al., 2006; Persellin & Goodrick, 2010). Although some studies have explored the significance of technology as a tool within professional development programs (Rienties, Brouwer, & Lygo-Baker, 2013; Teräs, 2016), no studies in Namibia have been conducted on technology integration in a professional development program in higher education. In addition, several studies have identified flaws in professional development programs; in particular the extent to which changes are made in the participant's teaching practice is not evident (Teräs, 2016).

This chapter will describe the significance of technology integration in a professional development program, and also explore how participants of the program (university lecturers) are implementing the modelled use of technology in their teaching practice. The objectives of the chapter are to understand participant's experience with the use of technology in a postgraduate certificate in higher education (PGCHE) and to consider whether the use of technology is effective in the participant's teaching practice.

BACKGROUND

The factors that influence higher education worldwide include social, economic and political developments that include larger and more diverse student populations, shrinking resources for higher education, greater public accountability and competition among higher education institutions. These changes have transformed the role of academics in higher education (Quinn & Vorster, 2004). In fact in many universities, academics live in "*a world of supercomplexity*" (Barnett, 1994) where the very framework on which their profession is based is continuously in a state of fluctuation (Quinn & Vorster, 2004).

In response to these global changes, institutions of higher education have created and implemented professional development programs that foster the teaching and technical skills of academic staff. Rhodes University in Grahamstown, South Africa, for example, introduced the Postgraduate Certificate in Higher Education and Training (PGCHET) in 2000. At Rhodes, most lecturers did not receive training for their role as teachers. Many lecturers were appointed based only on their academic qualifications and many joined the University directly from the private sector (Quinn & Vorster, 2004). A similar situation is apparent at the Namibia University of Science and Technology (NUST).

Creation of a Supportive Environment that Promotes Technology Use at NUST

The use of technology as a tool in higher education institutions has the possibility to enhance the professional development of academic staff and in turn, shape the quality of teaching and learning, given existence of a supportive environment. A supportive environment is characterized by among others, a clear vision for technology use, relevant institutional policies and frameworks guiding its use, deployment of well-maintained and updated technology infrastructure, integration of technology into the curriculum,

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