Challenges Faced by Key Stakeholders Using Educational Online Technologies in Blended Tertiary Environments

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ABSTRACT

Traditional learning spaces have evolved into dynamic blended tertiary environments (BTEs), providing a modern means through which tertiary education institutes (TEIs) can augment delivery to meet stakeholder needs. Despite the significant demand for web-enabled learning, there are obstacles concerning the use of EOTs, which challenge the continued success of blended implementations in higher education. As technology usage accelerates, it is important for TEIs to understand and address the current challenges faced by key stakeholders using EOTs in BTEs, and provide appropriate support. This paper identifies and discusses the challenges stakeholders experience in using EOTs in BTEs. Interviews with 13 blended learning experts from New Zealand, Australia and Canada identified the challenges in using EOTs, and the extent to which these prevent widespread adoption and effective use of EOTs in BTEs. The outcomes of this study will enable them to design relevant approaches to tackle current obstacles in EOT usage, and deliver meaningful support to key stakeholders in BTEs.

KEYWORDS

Blended Learning, Higher Education, Technology Problems, Teaching Technology, Web Technology

1. INTRODUCTION

Educational online technologies (EOTs) have revolutionised the delivery of online education, making a significant contribution towards the global increase in demand for higher learning. Across the globe “academic leaders at all types of institutions” have reported “increased demand for … online courses” (Allen & Seaman, 2010, p. 5), in fact, the proportion of institutions stating that online learning is critical to their strategy is at an all-time high (Allen & Seaman, 2015). The rapid emergence, adoption and demand for these online tools has engendered significant advances across the higher education sector. Traditional learning spaces have evolved into dynamic blended tertiary
environments (BTEs), providing a modern means through which tertiary education institutes (TEIs) can augment their delivery to meet stakeholders’ needs. These digital transformations signal exciting prospects, especially for ‘digitally native’ students and ‘vet on the net’ teachers.

Predictions about future online learning suggest that as “the pace of change” rapidly accelerates, “hybrid classes will proliferate” (Anderson, Boyles, & Rainie, 2012, p. 17). This is now happening, as “millions of students [take] online courses… [giving] evidence that this modality is meeting a clear demand” (Allen & Seaman, 2015, p. 21) for EOT use. Similar forecasts indicate that the digital delivery of course work via cheaper technologies will revolutionise higher education (Anderson et al., 2012), a prospect that aligns with results from a recent survey of students, which stated that ‘since 2010, there has been an increase in the use of most technologies for learning.’ (Gosper, McKenzie, Pizzica, Malfroy, & Ashford-Rowe, 2014, p. 298).

Despite the significant growth and demand for web-enabled learning, there are considerable challenges concerning the use of EOTs, which during an era of immense growth, pose a clear risk to the future success and sustainability of BTEs (Moskal, Dziuban, & Hartman, 2013), and create difficulties for key stakeholders as they strive to deliver effective learning opportunities. These challenges include but are not limited to attitudinal pre-dispositions and institutional barriers (Panda & Mishra, 2007), insubstantial training and development, inadequacies in instructional design support, and technical support concerning reliability and connectivity (Panda & Mishra, 2007), time investment and learning curve complexities (Christie & Jurado, 2009), and high online course workloads (Bolliger & Wasilik, 2009).

Significant efforts have been made to achieve greater understandings about EOT challenges. This has resulted in considerable subject-specific research, with varied and noteworthy contributions to the literature. Some of these studies have focused on technology integration into blended environments (Moore, 2013), technology to support institutional roles (Huynh, Gibbons, & Fonda, 2009), barriers to adoption of online learning (Bacow, Bowen, Guthrie, Lack, & Long, 2012), and the needs of online students (Mupinga, Nora, & Yaw, 2006).

However, while “our research foundation is rich” (Passey, 2013, p. 209), not all problems have been adequately identified and addressed. The nature and extent of EOT challenges evidently changes over time, as technology advances and stakeholder needs evolve. Gaps therefore exist, and unfortunately “significant challenges are preventing widespread effective implementation” (Nagel, 2013, p. 1), which collectively concerns TEIs. Some feel that “it is the university leadership…, it is the leaders at a university who must…see that…it happens…if widespread change is to occur” (Christie & Jurado, 2009, p. 278).

Thus, the literature abounds with efforts to identify the current challenges faced by stakeholders concerning EOT use, some of which occur due to the “lack of adequate, ongoing professional development” (Nagel, 2013, p. 1) creating difficulty for educationalists who “struggle to keep up with the ever-increasing…tools available” (Ko & Rossen, 2010, p. 16). Challenges also occur because students experience “difficulty with more sophisticated technologies” (Vaughan, 2007, p. 85), and also because faculties face obstacles “in acquiring new technology skills” (Vaughan, 2007, p. 87). There are also technical problems including Internet accessibility (Muilenburg & Berge, 2005), fear of online communication (Hanisch, Hughes, Carroll, Combes, & Millington, 2011), bandwidth constraints, high implementation costs, lack of technical and management support, and negative preconceptions towards the technology (Tuapawa & Skelton, 2012), all of which limit the adoption and effective use of EOTs. As the literature shows, challenges are not only technical, but also organisational, conceptual, and administrative (Bacow et al., 2012).

Responsively, higher education institutions, many of whom are “under significant pressure to provide affordable, sustainable approaches” (Beckem & Watkins, 2012, p. 61) using online tools, have collaborated to expand their knowledge base concerning “the specific EOTs being used in BTEs, and the ways in which these EOTs are being used” (Tuapawa, n. d.). Educationalists, administrators,
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