Resistance to Change Concerning Use of Educational Online Technologies in Blended Tertiary Environments

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ABSTRACT

The rapid emergence, adoption and demand for educational online technologies (EOTs) 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 delivery to meet stakeholder needs. Despite the significant growth and demand for web-enabled learning, considerable obstacles face key stakeholders concerning the adoption and use of EOTs. These obstacles challenge the continued success and sustainability of blended implementations in higher education. Resistance to change was identified as one of these challenges during interviews with 13 blended learning experts from New Zealand, Australia and Canada. This paper discusses this issue as it relates to EOT usage, how it is demonstrated, and the extent to which it impacts on key stakeholders. As technology advances and usage accelerates, it is important for TEIs to understand and address this issue, and provide support for the effective use of EOTs. As TEIs keep pace with digital advancements, the outcomes of this study will enable them to design relevant approaches to tackle the issue of resistance to change as it relates to EOT usage, and deliver meaningful support to key stakeholders in BTEs.

KEYWORDS

Higher education, online technology, blended, tertiary, change

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” are reporting “increased demand for …online courses” [1], in fact, the proportion of institutions stating that online learning is critical to their strategy is at an all-time high [2]. The rapid emergence, adoption and demand for these online tools has resulted in 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 delivery to meet stakeholders’ needs. These digital transformations signal exciting prospects, especially for ‘digitally native’ students and ‘vet on the net1’ teachers.

Predictions about future online learning suggest that as “the pace of change” rapidly accelerates, “hybrid classes will proliferate” [3]. This is now happening, as “millions of students [take] online courses… [giving] evidence that this

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1 ‘Vet on the Net’ phrase was coined by Kimberley Tuapawa, to describe the role that many seasoned educators now occupy, having transitioned over time from a traditional didactic ‘Sage on the Stage’ role, to a blended ‘Guide on the Side’ or ‘Vet on the Net’ role. The term ‘Vet on the Net’ describes an experienced academic delivering online learning using a range of EOTs.
modality is meeting a clear demand” [2] for the use of EOTs in BTEs. Similar forecasts indicate that the digital delivery of course work via cheaper technologies will revolutionise higher education [3], 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’ [4].

However, while “the number of programs and courses online continue to grow” [5] and while “experimentation and innovation are proliferating” [3], the evidence indicates that the perception of acceptance of online learning by faculty has decreased. “Only 30.2 percent of chief academic officers believe their faculty accept the value and legitimacy of online education” [5].

Despite the significant growth and demand for web-enabled learning, there are considerable obstacles concerning the use of EOTs, which during an era of immense growth, pose a clear risk to the future success and sustainability of BTEs [5], 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 [7], insubstantial training and development, inadequacies in instructional design support, and technical support concerning reliability and connectivity [7], time investment and learning curve complexities [8], and high online course workloads [9].

Significant efforts have been made to better understand the EOT-related challenges in BTEs. This has resulted in considerable subject-specific research, with varied and noteworthy contributions to the literature on EOTs in BTEs. Some of these studies have focused on technology integration into blended environments [10], technology to support institutional roles [11], barriers to adoption of online learning [12], and the needs of online students [13].

However, while “our research foundation is rich” [14], and a plethora of information surrounding EOT challenges pervades the atmosphere of current knowledge, not all problems have been adequately identified and addressed. The nature and extent of EOT related challenges change over time, as technology advances and stakeholder needs evolve. Gaps exist, and unfortunately “significant challenges are preventing widespread effective implementation” [15], which collectively concerns key stakeholders in BTEs. 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” [8].

Thus, the literature abounds with efforts to identify the current challenges faced by stakeholders, some of which occur due to the “lack of adequate, ongoing professional development” [15] creating difficulty for educationalists who “struggle to keep up with the ever-increasing…tools available” [16]. Challenges also occur because students experience “difficulty with more sophisticated technologies” [17], and because faculties face obstacles “in acquiring new technology skills” [17]. There are also technical problems including Internet accessibility [18], fear of online communication [19], bandwidth constraints, high implementation costs, lack of technical and management support, and negative preconceptions towards the technology [20], all of which limit the adoption and effective use of EOTs. As the literature portrays, challenges are not only technical, but also organisational, conceptual, and administrative [12].

As technology advances and usage accelerates, it is important for TEIs to understand and address current EOT challenges faced by key stakeholders in BTEs, and provide support for
the effective use of EOTs. This paper identifies resistance to change as a challenge as it relates to EOT usage, discusses how it is demonstrated, and the extent to which it impacts on key stakeholders. Interviews with 13 blended learning experts provided compelling examples of how resistance to change is expressed by key stakeholders, revealing the existence of specific ‘root cause’ beliefs concerning the use of EOTs to deliver learning.

These interviews form part of a phenomenological study, which examines the lived experiences of key stakeholders engaged with EOTs in BTEs, being undertaken by Kimberley Tuapawa in partial fulfillment of the requirements of her PhD at Newcastle University, Australia.

2 METHODOLOGY

This section explains the methods used to obtain data for this study. Thirteen blended learning experts from tertiary education institutes (TEIs) from New Zealand, Australia, and Canada were selected for semi-structured interviews using an expert sampling approach, similar to that used by Chapleo and Simms [21] who obtained data from interviews with ‘opinion-formers’, and Wagner et al. [22] who used experts to provide feedback. Obtaining data from experts across several institutions, contexts and countries was considered an appropriate way of “testing the evidence for consistency across sources” [23] and enforcing a level of plausibility to supplement the author’s literature review. It was considered that multiple realities, as experienced by a wider-ranging set of experts would strengthen the findings by yielding results which likely “fall within acceptable and known parameters” [23].

This may theoretically be achieved through experienced experts who are able to provide rich, mature and contextualised explanations compared to those of non-experts. Furthermore, literature indicates that an activity which increases the credibility of findings involves feedback from those with prolonged engagement in the field, with credibility included as a strategy used to test the rigour of qualitative research [24]. The expectation was that “this particular group of people thought to share a common experience… [would] offer meaningful insights into the phenomenon” and “talk candidly about their experiences” [24]. Expert sampling was thus considered as an effective way to elicit the views of persons with specific expertise, demonstrable experience and insight into a specific field or topic to support the validity of the inquiry [25]. It supposed that a greater level of contextual richness would be captured, satisfying the need for this research to be influenced by a distinct level of trustworthiness.

For inclusion in the interview, the participants had to fit the criteria of a ‘blended learning expert’. An expert is defined as “one whose special knowledge or skill causes him to be regarded as an authority” [26]. It is not uncommon for experts to be selected on relatively simple criteria, which can be defined through certain qualifications or experience [27]. Thus, the following criteria established a basis for the selection of experts: 1) the individual must have occupied an academic role for not less than 10 years in a tertiary blended learning context, 2) hold a post-graduate qualification, and 3) have conducted and published research in the area of blended learning.

Candidates without blended learning experience and publications, or without post-graduate qualifications were excluded from this study. The rationale for interviewing 13 participants was based on literature relating to qualitative research. Saldana [28] explained that there are varying opinions concerning the appropriate number of participants. Studying a single individual case in depth makes for a rich
profile, yet obviously the individual is not always representative of the population at large. It was believed therefore that a small group of participants would provide a broader spectrum of data for analysis, with a minimum of 10-20 participants needed to ensure credible and trustworthy findings [28]. The reasons for this range ensured that sufficient data would be obtained, whether from one person or 20 [28]. Accordingly, the use of 13 expert participants fitted within the required range. Obtaining data from several participants, rather than from one or two individuals was likely to provide a more rounded out and holistic set of results that were applicable in more than one setting. This ensured that “no untoward consequences or none that can be easily anticipated” [23] concerning EOTs in BTEs would be received. The use of open-ended questions generated deep, meaningful answers. A large quantity of data was expected and received.

The data were obtained data via semi-structured interviews conducted via online video-conferencing technology (Skype). Participants set aside at least 45 minutes of un-interrupted time to be interviewed. The aim of the interviews was to explore, clarify, and verify issues from the relevant literature. The interview contained 13 questions in total. Question five asked participants to explain ‘what kind of challenges key stakeholders might experience concerning the use of EOTs in BTEs’. The remaining 12 questions related to EOT, BTE, and key stakeholder matters not discussed in this paper. Reporting on them here is outside the scope of this paper.

The analysis of interview data involved sorting and coding. Audio recordings were made and then transcribed into a pre-formatted question-and-answer template, which later enabled like data to be coded in a standardised manner. NVivo software was used to code and analyse the interview data [29] using nodes. Table 1 outlines how a node was used to code the data relating to this interview question.

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<th>Table 1. Node linked to interview question</th>
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<td><strong>Node</strong></td>
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This node was used as a container for relevant responses. Data from this node was separated into 17 categories or memos, each of which contained data about a specific EOT challenge. One of these challenges was ‘resistance to change’. A memo was used as the foundation from which the discussion about this challenge was built and refined. The discussion contains a description of this EOT challenge, and incorporates comments made by participants. Figure 1 outlines this process.

### 3 RESULTS AND DISCUSSION

This section outlines some of the results obtained from the interviews, and discusses the findings. Blended learning experts were asked to identify challenges that stakeholders might encounter concerning the use of EOTs in BTEs, and explain why these situations presented a challenge. The participants identified a range of challenges. Noticeably, the challenges most commonly identified were resistance to change, time constraints, and high workload commitments. 10 out of the 13 experts identified and described resistance to change as a challenge. This challenge is described next, with the responses from blended learning experts incorporated into the description. Reporting on the other challenges here is outside the scope of this paper.
3.1 Resistance To Change

Comments during interviews with blended learning experts indicate that resistance to change is a significant challenge that key stakeholders experience. Comments from experts indicate that resistance to change can occur in those with whom there is ‘no actual desire to change in the first place’, and occurs also in those reluctant to expend additional effort to engage new methods. Resistance to change appears to be symptomatic of more explicit ‘root cause’ beliefs concerning the use of EOTs to deliver learning.

One ‘root cause’ involves the traditional and well-entrenched perspective concerning the superiority of face-to-face delivery. Concerns about online delivery and preferences are grounded firmly in long-standing experiences with didactic ‘sage on the stage’ techniques. For those having occupied a decades-long ‘sage’ role, the cultural capital implicit in ‘chalk and talk’ techniques are considered more appropriate, and in certain practical-based disciplines are expected, while online methods are relegated to ‘supplementary’ status or touted as impractical. “Skeptics and critics abound. Not everyone is enthusiastic about the growth of technology-mediated teaching” [12]. Statements like ‘you can’t teach this online’ express collective doubt from seasoned academics towards online delivery. One expert identified this as ‘the biggest issue’, having regularly experienced teacher-led comments like ‘you’ve got to look at the white’s of their eyes while they’re [learning]’.

Another ‘root cause’ reason for resistance to change involves negative opinions concerning the adoption of EOTs. Attitudinal issues appear more frequent among older academics who argue the merits of traditional methods with ‘we’ve always done it this way’. “Online instruction is alien to most faculty and calls into question the very reason that many pursued an academic career in the first place” [12]. Their familiarity and reliance on ‘old school’ methods ‘where everything was on paper’ has made ‘the switch to…online’ challenging. For forward-moving innovators, ‘champions and pioneers’, the generational gap is considered as a great
chasm, being made wider through the reluctance of older academics or students to bridge their learning and ‘traverse’ into newer online territories. Challenges intensify when recommendations for change emerge from a grass-roots level, rather than from ‘management decree’.

Negative opinions towards EOT usage impacts significantly ‘on the uptake’. Resistance to change and adoption of EOT usage is also a result of a fear amongst faculty “that online instruction will be used to diminish…ranks” [12] or employment levels. Teaching staff with ‘a barrow to push’ were described by one expert as ‘alienating’ others against EOT usage, holding ‘sway over students’, thereby causing ‘a serious problem’ which could ‘change the whole dynamic of the system and bring it down to its knees’. Attitudinal issues were not limited to teaching staff. Experts remarked on the challenges faced by many ‘mature-aged’ students, who are described as ‘traditional’, and who ‘don’t have time to engage’ online, experience when ‘not so fluent in technology’.

Explaining the basis for reluctance to use, Bacow et al. [12] indicates that faculty are “extremely reluctant to teach courses that they do not ‘own’” [12], and may be unwilling to embrace a course that does not allow for a high degree of customisation in how, what, and when relevant material is presented to their students [12]. However, preparing and customising a course online requires a much higher initial investment of time by a faculty member than teaching the same course in a traditional format [12]. Blended learning experts describe the delivery of online learning as ‘very time…and resource consuming’, and ‘a huge time limited effort’ in an already hectic schedule which can quickly ‘become unmanageable’. Teachers, although having ‘creative ideas’ on EOT usage, ‘don’t always have the time…to implement and design…optimally’. Delivering learning within an online environment ‘will take significantly longer’ if teachers are ‘new to blended learning’ and are ‘still coming to terms with…new tools’. Experts collectively agreed that for teachers and support staff ‘the workload is one major issue’ contributing to challenges concerning EOT usage. ‘Academics…are really tired’ one expert noted, ‘they work so much’ and ‘don’t have enough time to do the training they need to do’. In spite of this ‘academics are expected to be very broad in their skills set’, being ‘expected to research, design beautiful courses, be available 24 hours a day’.

Another ‘root cause’ reason for resistance to change identified by the experts is simply a ‘fear of the new and the different’, coupled with the intimidating prospect of having to rethink and relearn delivery through new channels.

4 CONCLUSION

EOTs have revolutionised the delivery of online education, providing a modern means through which TEIs can augment delivery to meet stakeholder needs. Despite the significant growth and demand for web-enabled learning, there are considerable obstacles being faced by key stakeholders concerning the adoption and use of EOTs. These obstacles challenge the continued success and sustainability of blended implementations in higher education. Resistance to change was identified as one of these challenges, during interviews with 13 blended learning experts from New Zealand, Australia and Canada.

This paper discussed the issue of resistance to change, as it relates to EOT usage, how it is demonstrated, and the extent to which it impacts on key stakeholders. Resistance to change is a significant challenge that key stakeholders experience, and it occurs for a variety of reasons. Resistance to change appears to be symptomatic of more explicit ‘root cause’ beliefs concerning the use of EOTs to deliver learning. These beliefs include the
perception of the superiority of face-to-face delivery, attitudinal issues and negative opinions towards technology or change, familiarity and reliance on traditional methods, a fear that online delivery will be used to reduce employment levels, a dislike for online courses that are not ‘owned’ or that are perceived as not ‘customisable’, and the lack of time to learn and deliver online learning, and a fear of ‘the new and the different’.

As technology advances and usage accelerates, it is important for TEIs to acknowledge, understand and address this issue of resistance to change, and provide support for the effective use of EOTs. As TEIs keep pace with digital advancements, this paper can inform their efforts to design relevant approaches to tackle this issue, and deliver meaningful support to key stakeholders in BTEs.

This paper provides valuable insights to encourage collaboration, information sharing and a level of awareness to a range of key stakeholders across the tertiary sector concerning the issue of resistance to change. Future research by the author will address potential solutions to these challenges. This will be supported through phenomenological evidence that explores the experiences of key stakeholders using EOTs in BTEs.

REFERENCES


