Mind the gap: the chasm between research and practice in teaching and learning with technology (0016)

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Abstract

Although there has been considerable research in uses of technology in higher education, a problem still remains in relation to theoretically underpinned developments and how they impact positively on practice. This is underlined by the imprecise manner in which enhancements in learning are understood and characterised, particularly in relation to uses of technology. What have not been well modelled are the inter-related factors in understanding the associations between learning, teaching and technology. Typically, existing research is under-utilised, and research and practice tend to develop without cross-fertilisation. The gap between research and practice in the use of technology in teaching appears to be systemic across higher education and is certainly a problem worthy of further attention. This presentation explores current research in teaching and learning with technology in order to model how we might narrow the gap between research and practice.

Extended Abstract

Despite considerable research showing that much technology use in higher education has not been pedagogically grounded (Price & Kirkwood, 2014), there continues to be a problem in relation to theoretically underpinned developments. This is evidenced by the lack of impact that any of the existing pedagogical research has had on practice. It is also manifest in unchallenged use of terms describing technology utilisation in education, such as 'technology enhanced learning' (TEL). Despite research having been conducted for over two decades, it is not obvious that a shared understanding has been developed. Neither has it been made clear what constitutes an *enhancement* of the student learning experience in higher education. While the term TEL has been used extensively throughout the sector, it has tended to be applied in an imprecise way to describe a diverse range of educational activities (Kirkwood & Price, 2014).

This lack of precision appears to stem from an under-utilisation of theoretical models as a means of examining how technology enhances student learning (see, for example, Means, Toyama, Murphy, Bakia, & Jones, 2010) and as a method of generalising about effectiveness. Academic teachers and managers cannot develop a better understanding in this field without a clear articulation of what is meant by *learning in higher education* and, as a corollary, what might indicate that an *enhancement* had been achieved. These are vital if research and evaluation are to inform the future practices of teachers and students in higher education to maximise effectiveness.

Price (2014) has argued that understanding the teaching and learning enterprise requires a holistic perspective in order to model the inter-related factors. Significant contributions have been made to the field of student learning in higher education, yet there is limited evidence of this being applied in relation to understanding how students might learn in a digital environment. What have not yet

been well-modelled are the inter-related factors in understanding the associations between learning, teaching and technology. In fact, when considering the field from a student learning perspective, it could be argued that the technology *per se* is a diversion. In other words, does good pedagogy endure regardless of the medium?

So how could we model the relationship between teaching, learning and technology? Just as importantly, how do we bridge the chasm between research and practice? In our previous work, we have shown that the findings of existing research (particularly that relating to teaching and learning) is under-utilised by those researching the use of technology in higher education (Kirkwood & Price, (2012, 2013a, 2013b, 2014; Price & Kirkwood, 2011, 2014). So what might underpin this problem and how might we go about addressing the issue? This presentation will examine the current research in higher education in order to model teaching and learning with technology, and to consider how we might narrow the gap between research and practice.

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