Chapter 1

In Love and War: Blended Learning Theories for Computer Scientists and Educationists

Esyin Chew
University of Glamorgan, UK

David A. Turner
University of Glamorgan, UK

Norah Jones
University of Glamorgan, UK

ABSTRACT

Blended learning involves the combination of two fields of concern: technological and instrumental considerations are, to a greater or lesser extent, combined with pedagogy and educational theory. The result of this is that blended learning suffers from considerable difficulties of definition, and its theoretical foundation is correspondingly weak. For this reason it is desirable to expose the philosophical and theoretical foundations of blended learning to critical scrutiny. Creating a foundation for blended learning will involve an examination of the gap between the paradigms and practices of educational theory and educational technology. The result should be a space within which academics from the diverse disciplines involved may be able to discuss and resolve their problems. This chapter will explore the contrasting disciplinary perceptions and suggest a sketch for blended learning theory.

INTRODUCTION

Blended learning involves the combination of two fields of concern: technological and instrumental considerations are, to a greater or lesser extent, combined with educational theory. There is general consensus that pedagogical considerations should be given priority over technical issues. However, technicians and educationists have different vocabularies, and even where they appear to use the same terms, the context that each gives to the term means that there is ample room for misunderstandings. For example, computer specialists and educationists use the term 'ontology' to mean entirely different and mutually exclusive areas of concern, so that even when they seem to be talking about the same topic, the concerns of one may be ignored by the other. Such misunderstandings may extend to areas of...
‘learning theories’, where computer specialists may be more instrumental, or tactical, than educationists. Consequently, terms such as ‘efficiency’ or ‘efficacy’, which may seem perfectly natural to the computer specialist, may seem problematic or inappropriate to the educationist.

The result of this is that blended learning suffers from considerable difficulties of definition, and its theoretical foundation is correspondingly weak. For this reason it is desirable to expose the philosophical and theoretical foundations of blended learning to critical scrutiny. Creating a foundation for blended learning will involve an examination of the gap between the paradigms and practices of educational theory and technology. For example the term “technology” for educational technologists is referring to VLE (Virtual learning Environment), web 2.0 or ICT used for education whereas educationists perceive the same term as any technology, including laser pen and whiteboard marker. The result should be a space within which academics from the diverse disciplines involved may be able to discuss and resolve their problems. Therefore, we would like to affirm that the term “technology” or “educational technology” as used in this chapter means ICT used education.

This chapter will explore the contrasting disciplinary perceptions and suggest a sketch for blended learning Theory. This will be accomplished by: (1) Identifying and exploring how educationists (possibly pedagogy classicists) and computer scientists (possibly blended learning romantics) differ in terms of what they think needs to be accounted for, and how, when blended learning is based on scholarly evidence. The paradigms of educationists and computer scientists will be examined through a philosophical examination, in part illustrated by a survey of the opinions of specialists who work in blended learning in a number of settings. (2) Offering an idiom for discussing a set of issues both pressing yet beset by confusion. And (3) Presenting a preliminary sketch for blended learning Theory on the basis of (1) and (2), together with educational practices and theories drawn from the authors’ personal experiences.

In the field of computer science and engineering, efficiency, effectiveness and experimental results are the main focus, whereas, in education, the variety of social contexts and the complexity of educational purposes must be taken into consideration. The authors assert that technology and effectiveness by itself does not necessarily improve the teaching and learning experience. On the other hand, learning theories need to be grounded in such mundane concerns as whether resources are available for use. This requires that attention be paid to issues of access and allocation. Only through mutual understanding can initial principles for the grounding of blended learning Theory be established. Educational theory provides the basis for a coherent and stringent critique of blended learning practices, and by that means provides a framework for grounding its theories.

IN LOVE AND WAR: PERCEPTIONS FOR BLENDED LEARNING

The Scholarly Definitions and the Debates of Blended Learning

We are not sure which type of learning to use so we will use lots and hope that the whole is greater than the sum of its parts...blended learning gave way to ‘blurred learning.’ (Morrison, 2003, pp. 1)

In earlier work we found that researchers and practitioners consider that blended learning is currently embryonic in its development and many of the related concepts remain debatable (Chew et al., 2006). Most often, e-learning in higher education today refers to web-based learning and teaching materials and e-tivities (Salmon, 2002). Put very crudely, blended learning simply means a mixture of instructor-led teaching with some
Related Content

Designing Blended Learning Communities
www.igi-global.com/chapter/designing-blended-learning-communities/40379?camid=4v1a

The Research Field of Reality Environments in Education
www.igi-global.com/article/the-research-field-of-reality-environments-in-education/223156?camid=4v1a

A Blended Approach to Canadian First Nations Education: The SCcyber E-Learning Community
www.igi-global.com/chapter/a-blended-approach-to-canadian-first-nations-education/92981?camid=4v1a

The View from a Flipped Classroom: Improved Student Success and Subject Mastery in Organic Chemistry
www.igi-global.com/chapter/the-view-from-a-flipped-classroom/163530?camid=4v1a