

Chapter 91

Materials Design and Pedagogy for Technology-Enhanced Language Learning

Hazel L.W. Chiu

The Hong Kong Polytechnic University, China

ABSTRACT

Advancement in technology has facilitated the transmission and access to learning resources, and communication among participants in the teaching and learning process. However, a technology-enhanced learning environment does not automatically produced high quality learning outcomes. It needs to be supported by suitable learning materials and strategies for blended learning which suit the learning needs of students in the present educational context. With reference to theories and research in materials design and pedagogy within a blended educational environment, this study examines the experience of implementing web-work requirements for a language course in a university in Hong Kong. These web-based activities include objective web exercises, as well as activities making use of social networking tools such as blogs, wikis and discussion forums for students to share ideas. Based on the findings, suggestions are made to improve pedagogy and materials design in mediated learning environments, in areas regarding integration, engagement, and autonomy.

INTRODUCTION

Current university curriculums are becoming increasingly inclusive. Aside from subject-related outcomes, universities are expected to cover other learning outcomes for the generic development of students, such as those related to all-round development, creativity, sense of ethical and social responsibility, cultural understanding and global outlook (The Hong Kong Polytechnic University, 2013). With the advancement in technology, blended learning has emerged as a useful means of accommodating variegated curriculum demands through the thoughtful and optimal integration of face-to-face and online learning experiences so that the strengths of both are blended into a unique learning experience to suit different educational contexts and purposes (Garrison & Vaughan, 2008).

DOI: 10.4018/978-1-5225-5472-1.ch091

To supplement face-to-face classroom teaching, a blended learning environment greatly facilitates the transmission and access to learning resources, and communication between participants in the teaching and learning process. Described simply as “face-to-face instruction with computer-mediated instruction” by Bonk and Graham (2006, as cited in Gruba & Hinkelman, 2012, p.3), blended learning provides a facilitative educational environment making use of technology as an enabling tool for teaching and learning. As suggested by Garrison and Vaughan (2008), blended learning facilitates the construction of a community of inquiry that supports connection and collaboration among learners and creates a learning environment that integrates social, cognitive, and teaching elements to encourage and sustain critical reflection and discourse.

Education in the 21st century is increasingly supposed to evolve around the learners, who are often considered to be the centre in the teaching and learning processes. Starting from the last two decades of the 20th century, educational researchers have often advocated the importance of attending to individual learner needs and the role of learners to actively participate in making decisions about various aspects of their own learning (Nunan, 1988, 1989; Richards, 2001). These ideas on learner-centredness have also been integrated into concepts of self-access (a kind of “self-directed learning”, as defined by Benson, 1992, p.31) and independent learning (which denotes learning which is free from reliance on others (Benson & Voller, 1997). Additional learning efforts by learners beyond the formal curriculum have often been encouraged as a means of their exercising autonomy to fulfil their own learning needs.

This concept of autonomous self-learning has become one of the major learning expectations of the millennial students, facilitated by the development of technology. According to Benson and Voller (1997), “autonomy” indicates the ability to make one’s own decisions about what to do without being influenced or instructed to do so. With the aid of technology, students nowadays have easy access to a vast amount of learning resources. They also enjoy more flexible modes of learning and are less restricted by time and space. As suggested by Howe and Strauss (2007), the millennial students are special individuals who are pressured to excel in various competencies and keen to focus on achievements. Technology seems to be playing a useful role in attending to their learning needs in these aspects.

A number of recent studies on the different uses of technology for language learning have shown that learner attitudes are generally quite positive concerning e-learning, such as in the use of social networking tools (Brick, 2012), peer interaction via computer-mediated communication (CMC) (Wu, Marek, & Yen, 2012). A small number of studies, such as the one by Sarre (2013) on TBLT in technology-mediated contexts, also point out the need for specific types of learner support in order to make the best use of technology.

Research has shown that technology can facilitate the development of different types of language skills, such as vocabulary learning (Gorjiana, et.al., 2011). A number of recent studies have also shown that web-based learning, such as the use of CMC (Cheng, Chen, & Brown, 2012; Li, 2013), blogs (Arslan & Sahin-Kizil, 2010; Sun & Chang, 2012; Vurdien, 2013), and wikis (Aydin & Yildiz, 2014; Liou & Lee, 2011) has the potential to facilitate the development of writing skills.

Some studies have particularly shown that CALL helps to develop autonomy in language learning, through social network tools such as wikis (Kessler & Bikowski, 2010), collaborative digital technology (Hafner & Miller, 2011), and instructional support (Terhune, 2013).

To attain high performance in various areas of abilities, however, requires the development of complex cognitive skills or higher order thinking skills, such as critical and creative thinking skills of logical reasoning, analysis, evaluation, judgement, problem-solving and creation (Brookhart, 2010). However,

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