Chapter 8
E-Learning in Higher Education in China and Belgium:
Student, Teacher, Contextual Variables

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ABSTRACT

This case study aims at examining issues related to the adoption and implementation of e-learning in the Chinese and Flemish context, and identifying the similarities and differences regarding the student, teacher and contextual variables. A parallel e-learning design was set up at Ghent University, (Flanders) Belgium and Beijing Normal University, China. A series of variables were considered at the student, teacher and contextual level. Chinese and Flemish students differed in many aspects in their perceptions of and satisfaction with the e-learning environment. Chinese and Flemish teachers were clearly in different stages regarding technology adoption for education. These disparities are related to the specific contexts (both institutional and cultural). Linkage is made to the current status quo of the two contexts and the cultural dimensions, such as individualism/ collectivism, power distance and competition.

BACKGROUND (ORGANIZATIONAL, THEORETICAL AND EMPIRICAL)

Ghent University in (Flanders) Belgium and Beijing Normal University (BNU), in China are both comprehensive and research-oriented universities, and both have a long history in its own setting. At Ghent University, an e-learning system called Minerva has been implemented from the early 2000s, and since 2003 it has been adopted institution-wide. All teaching staff uses this system to support their teaching activities to a certain degree. All registered students have automatic and personalized access to the system. At Beijing Normal University, there is an e-learning system available, but the staff and students have to apply and register for the access to the system. There is no institution-wide policy and

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requirements for the teaching staff to implement this e-learning system. The teachers apply it only on voluntary basis. Some teachers apply it for the purpose of competing for "elite courses" and some others for experimental purposes.

The e-learning system at Ghent University brings these advantages to its staff in view of convenient delivery of information and the facilitation of ways to communicate and share knowledge between teachers and students, and among students. At Beijing Normal University, e-learning is playing a relatively limited role in facilitating teaching and learning, communication, and sharing knowledge in blended learning settings. However, it has started to play a major role in offering degree-based distance education and in-service training. In this case study, we focus on the use of e-learning in blended learning environments, and especially the adoption of e-learning as a collaborative learning and knowledge sharing tool for university teachers and students.

In many Western countries, higher education has transformed tremendously with the implementation of e-learning technologies. E-learning brings a lot of advantages for students and teachers, such as the flexibility of time and space, and convenient communication and interaction. However, the adoption of e-learning is much more than a technology issue (Robertson, 2004). E-learning readiness is related to its connectivity, capability, content, and culture of an institution (Economist Intelligence Unit, 2003). Next to infrastructure issues, policy of integrating the use of Information and Communication Technology (ICT) in education, teachers' course design, communication requirements, teacher and student technology literacy, and institutional support are among the challenges that institutions, teachers and students are facing (Educause, Centre for Applied Research, 2003).

E-learning is essentially a network-enabled transfer of skills and knowledge. Two main functions of e-learning are often discussed: the *distribution* of course material, and *interactive* learning. Underneath these two basic functions, we can distinguish two different pedagogical views of teaching: one is oriented towards the delivery of information and the other is based on the social constructive perspective that teaching and learning foster active and interactive learning processes. The latter is also in tune with the criteria of meaningful learning and can demonstrate the potential of technology-enhanced learning (Löfström & Nevgi, 2007).

Although technological advances have led to global communications across national boundaries and geographical limitations, we cannot ignore the influences of culture on people's perceptions and behavior, such as adoption of technology, and preferences for the way of teaching and learning. Segall, Dasen, Berry & Poortinga (1990) point out that "we are what we are because of our culturally based learning". Culture is a shared, learned, symbolic system of values, beliefs and attitudes that shapes and influences perception and behavior (Bodley, 1994; Douglas, 1992). In brief, culture refers to "the shared way of life of a group of people" (Berry, Poortinga, Segall & Dasen (2002, p.1). However, we need to bear in mind that culture is dynamic and can be taught and learned (Geertz, 1993).

Chinese culture is traditionally regarded as part of the Confucian-heritage cultures (CHC) (Baron, 1998; Smith & Smith, 1999; Watkins & Biggs, 2001). Flanders is the Dutch-speaking part of Belgium. Building on previously available literature and empirical data, the Flemish culture is linked to an individualist culture, characterized by a less power distance, stronger individualism and higher uncertainty avoidance compared to the Chinese culture (Hofstede, 1986) (see Figure 1). However, we have to note that the empirical data to ground these qualifications have been collected more than 30 years ago, and calls for more recent analysis of the cultural dimensions due to the globalization and internationalization process, especially in the higher education arena.