

CHAPTER 2

Literature Review

This chapter consisted of two parts. *Part I* discussion about the revolution of online learning and the concepts related to this study. *Part II* reviews related to studies of the online courses in nursing.

Part I: The revolution of online learning and the concept related to the research

A rapid growth of communication technology impact on the revolution of online learning for adult learners, especially in higher education (Hiltz & Turoff, 2005), the online learning has expanded worldwide for variety of education programs including business, medical and social sciences. Indeed, the online learning took root in distance education in the 1980s and significantly expanded with the explosion of the Internet in the 1990s (International Council for Distance education, 2009, Moore, Deane & Galyen, 2011). However, some educators argued that the current evolutionary changes in educational technology and pedagogy will be seen in the next 50 years from face-to-face courses using objectivist, teacher-centered pedagogy and offered by tens of thousands of local, regional, and national universities to online and hybrid courses using digital technologies to support constructivist, collaborative, student-centered pedagogy, offered by a few hundred “mega-universities” that operate on a global scale (Hiltz & Turoff, 2005).

The definition of online course is widely discussed. The origins of the term e-Learning are most likely originated during the 1980’s and are interchangeable with web-based, and e-Learning. (Moore, Deane & Galyen, 2011). In general, online courses are those in which at least 80 percent of the course content is delivered online. Face-to-face instruction includes courses in which zero to 29 percent of the content is delivered online. This category includes both traditional and web facilitated courses. There remaining alternative, blended or hybrid instruction has between 30 and 80 percent of the course content delivered online. (Allen & Seaman, 2011)

Online education is a form of distance education that provides students with

opportunities to engage in lifelong learning for personal development without the restrictions of time and space. Although the online learning is popular, some educators reported that online education obtains some limitation in building social interaction and its quality is not as rigorous as its face-to-face counterparts (Palloff & Pratt, 2011). It is challenge for educators and course designers to design effective online courses which are able to build up strong social connection among learners as well as to provide the richness of course content. In addition, the effective online course not only the accessibility of online learning but also its connectivity, flexibility, and ability to promote varied interactions. (Moore, Deane& Galyen, 2011).

The online course development that based on connectivism, had been conducted in the form of research and development aiming to leadership development and change management for nurse executives in ASEAN countries as well as building ASEAN nurse executives' network thereafter. According to George Siemens (2005), principles of connectivism are for examples as below.

“Learning is a process of connecting specialized modes or information sources. Nurturing and maintaining connections is needed to facilitate continual learning. Currency (accurate, up-to-date knowledge) is the intent of all connectives for learning activities.”

Siemens further indicated that connectivism also addresses the challenges that many corporations face in knowledge management activities. Furthermore, a principle of connectivism is that:

“Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.” Therefore in this research design, researchers focused on “how to learn” more than “what to learn”.

Having well-realized, nurses from various countries in ASEAN community may require different approaches due to ability of access to technology, language and cultural communication. Speed of “idea to implementation” was also improved in a systematic review

of learning. Online learning environment was designed. After completion of the online course, all attending participants were asked to provide course evaluation consequently.

The decision to choose an evaluation model, suggested Madaus & Kellaghan (2000) depends on a number of important factors such as the evaluation questions, the issues that must be addressed with the available resources. In this research, the chosen course evaluation was based on the Monterey Institute for Technology and Education (MITE 2010). The MITE online course evaluation consists of seven components: (1) Course Developer and Distribution Models, (2) Scope and Scholarship, (3) User Interface, (4) Course Features and Media Values, (5) Assessments and Support Materials, (6) Communication Tools and Interaction, and (7) Technology Requirements.

Evaluation research asserted by Siew Hong (2007), it does not aim to discover new knowledge like other researches. It aims to study the effectiveness with which existing knowledge is used to inform and guide practical action to help improve the quality of a program or course. The evaluation also aims to detect strengths and weaknesses in the course processes, with a view to make recommendations for altering the structure, or adjusting the implementation of the course. In this research, the evaluation aims to investigate the participants' views who had attended the online course with the specific intention of weighing up their strengths or weaknesses and providing feedback about how things might be improved for further developing an online training course in the future.

Part II: Related Studies of the Online Courses in Nursing

There are a number of studies online nursing courses. Most studies were conducted in order to develop sound online courses and evaluate the effectiveness or quality of the online courses. For example:

Haggerty (2009) developed a fully online postgraduate course for registered nurses working in a National Corrections Service in New Zealand. The tutorial staff working on the program were practice experts, and not only familiar with instructional design processes, but also knew what content was required and had clear learning outcomes for the program. An analysis of the student group was undertaken as a first step in the process. A framework for the development and design phase was introduced by an externally contracted instructional designer and modified by the teaching team. The implementation of the course has proven

very successful, with a clear community of practice developed within the online environment, which contributes to student learning and teacher satisfaction. The development of this online course used the instructional design process ADDIE (Analysis, Design, Development, Implementation and Evaluation) and LATAR Framework was used for design and development of this course.

L: Learning Outcomes. The learning outcomes are the accredited component of the course and need to be clearly understood, with all else flowing from them.

A: Assessments. How learning outcomes will be measured. All learning outcomes should be measured within the assessment schedule.

T: Topics. Topics that the course will be covered, clearly differentiating between what is '*need to know*' and what is '*nice to know*'.

A: Activities. The teaching / learning activities that will be included within the online course to ensure connection and deep learning occur for students. These need to link with the components above and should be enough to engage the students, otherwise will become overwhelming.

R: Resources. What web links, literature, content, etc needs to be developed and included in the LCM.

He and Hu (2012) developed a comprehensive evidence-based nursing practice website for Chinese nursing students and staff at Fudan University, China. The research reported the importance of peer and mentor support, which could facilitate self-learning through mentor-mentee dialogue and discussion when learners encounter questions during study. Secondly, in developing countries, there are limited numbers of highly qualified nursing academics, leading to fewer learning opportunities. Web-based communication seems to be an effective and attractive solution of limited learning opportunities. The development process of the online course was also proposed. The auxiliary structures, symbol system, figure, the navigation bar, the sub region on top of every web page used to navigate between web pages, and the site map, which organized all the pages of this website, typically arranged in hierarchical fashion. The development team invited user representatives to assess functionality and ease of use of the website and weighed the benefits and costs of modifications suggested with the user representatives, until user representatives confirmed the

user interface was functional, balanced and user friendly. The representation and feedback mechanisms helped to gain negotiated decisions on website content, format, links and coverage.

Susana Martínez Naharro & Labarta (2007) from the Open Polytechnic University, Spain produced e-learning for postgraduate students. Several expert agents worked together in a multidisciplinary mode that provided quality to the courses. They proposed the courses development process as follows.

1) The design of the e-learning Platform, framework of the course, whose presentation was accurately studied. Experts worked together to establish title of the course, duration in hours, learning objectives, contents to be developed, assessment.

2) The structure of pedagogic units, predefined by UPV as recommended in pedagogic terms. The e-learning platform was the first approach. The author's tool was structure and basic operation. Pedagogic criteria were taken into account in the elaboration of pedagogic units for an on-line course. A constructivist view of learning was assumed, whose principal objective is that the student reaches a significant learning of the subject. In turn, the teacher is a guide in the process, whereas the learner plays an active role, as builder of his or her own learning. The teachers, experts in the discipline, designed and created the materials of the course. At this stage the introduction of the contents into the platform and the management of possible multimedia needs were carried out. The pedagogic expert checked whether the material really fulfilled the appropriate requirements for a training course via Internet.

3) Area of assessment of the course (both in feedback questions and in self-assessment). Once the course has been taught, an evaluation of both the satisfaction of students and development of the course is made, in order to be able to establish in this way a continuous improvement of the process and our courses in general. Continuous feedback of the process was conducted to ensure quality of the online course.

In summary, most online nursing courses were designed for graduate and postgraduate nurses. There is no single approach being taken by institutions in providing training for nurses. Facilitating learning communities at a distance requires some new approaches to the practice of managing the teaching and learning process.