#### CHAPTER 3

#### Methodology

This chapter details the research design, sample and settings, instruments, procedures, and data analyses.

**Research Design** This research employed a quasi-experimental design with one group posttest only. The research and development design is used in order to address the purposes of the study.

## Sample and Setting

A purposive sample was used in this study. There were 74 eligible executive nurses who applied to study in the online training course entitled "Leadership Development and Change Management for Nurse Executives in ASEAN Countries" were qualified to enroll in the course. The inclusive criteria were as follows:

1. Serve as nurse executives (nurse administrators or nurse leaders) in 10 ASEAN countries, both nursing services and nursing education attached to public and private sector; for example Head Nurses, Head of Nursing Department, Dean, School of Nursing, etc.

2. Good English communications with ability to listen, read, and write well, as well as information technology knowledge, or

3. Recommendation letter from participant's Chief/Director to support the proficiency in English and information technology knowledge

There were only 49 eligible participants who studied in the online course at least one module. Only 37 participants answered and returned evaluation form for the online training course back via electronic mail. Attrition rate was approximately 24.50 percent.

### **Research Instrumentation**

According to the first research question, the focus group was used to develop the online course entitled "Leadership Development and Change Management for Nurse Executives in ASEAN Countries". For the second research question, dependent variables in this study included the learning process and learning outcomes. The learning outcomes included knowledge and experiences, and course satisfaction, strengths of the course, and weaknesses of the course.

The evaluation form for the online training course on Leadership Development and Change Management for Nurse Executives in ASEAN Countries" was used to evaluate the LCM website, content Modules, knowledge sharing, and overall course. This tool composed of three parts: Part I General Information, Part II LCM Course Evaluation, and Part III Further Information. Part II was developed and based on Monterey Institute for Technology and Education (MITE, 2010). There are seven components, totaling 26 items in order to evaluate the opinions about course developer and distribution models (2 items), scope and scholarship (4 items), user interface (3 items), course features and media values (9 items), assessments and support materials (3 items), communication tools and interaction (3 items), and technology requirements (2 items). Part III consisted of five qualitative questions which asked about the strengths and weaknesses of this course, the LCM website, the numbers of modules they attended, which module they like the best with given reasons, benefits received from learning the course, and the reach to their expectation after studying the course.

Three experts were selected to examine content validity of this evaluation form. Two of them were experts; the first one had experiences in the distance learning system over 20 years and the other was an executive nurse who have had experienced in being a nurse supervisor in a general hospital in Thailand. Researchers improved the evaluation form following the experts' suggestions. Finally, the content validity index of this evaluation form was 0.8 before using in the study. The evaluation form and research informed consent were sent to all participants through electronic mail with a request to reply back within a week.

# **Research Procedures**

This quasi-experimental design study utilized a single group post- test design was to answer the proposed research questions. The online training course was divided into 2 phases:

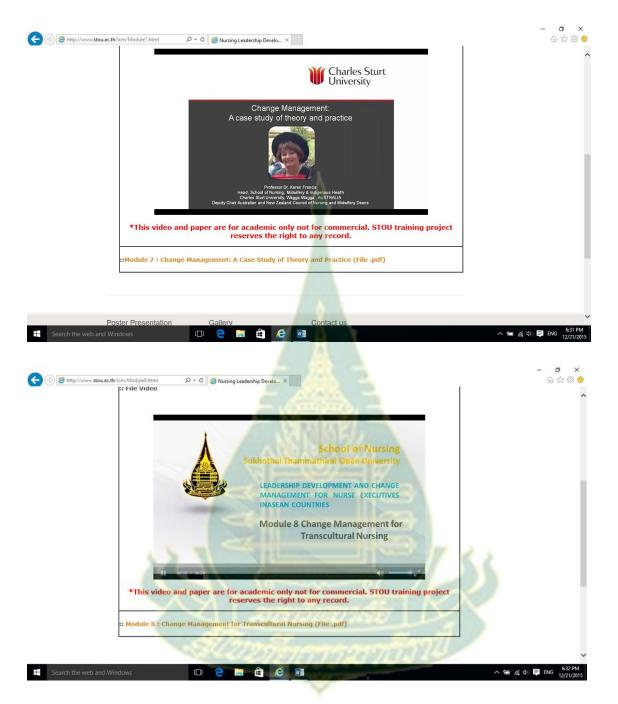
*Phase 1 Interactive Online learning* that composed of 10 content modules focusing on "leadership development and change management". The LCM website (http://www.stou.ac.th/lcm) was employed as communication and learning tools.

*Phase 2 Face-to-Face Intensive Seminar* emphasized upon special lectures, group interaction for developing best practice on leadership competencies for nurse leaders in ASEAN countries as well as network development and nursing administration innovation development. This paper will only present online course activities.

The online course was conducted by three steps as below:

Step 1: The development of the four - month online course on "Leadership Development and Change Management for Nurse Executives in ASEAN Countries" based on connectivism approach. 10 content modules based on a clear taxonomy and specific criteria was designed and presented by resource persons from various fields whose expertise contributed in each module. Content modules provided visual distinction and consistency to specific types of information that enabled participants to simply learn step by step. The modules, for examples, are illustrated as Figure 1.





## Figure 1 Examples of Module7 & 8

World Wide Web, *LCM website* (http://www.stou.ac.th/lcm/) was utilized for support participants' learning and sharing their knowledge as well as valuable experiences. Based on Monterey Institute for Technology and Education (2010), the development of the LCM website was supervised by the first author who has experienced on teaching & learning via internet, and

the development of short course training at STOU for more than 20 years. The LCM website is demonstrated as Figure 2.



## Figure 2 Components of the LCM website

The characteristic of such online course is an instructional science and art that transfer knowledge through joint learning activities between training participants and training facilitators. Resource persons whose expertise in module contents of the training course or lectures played a vital role in providing information, guidance, screening overwhelmed online information/knowledge to training participants or learners, and then integrated with practice that would accordingly bring about development of new body of knowledge or innovation for nursing leadership and administration.

Step 2: Seventy four (n=74) participants were recruited by purposive sampling from nurse executives and registered nurses in five ASEAN member countries namely Thailand, Malaysia, Myanmar, Lao PDR and Vietnam. All participants registered to attend the online course and conducted three activities as follows. *Firstly*, participants learned by attending online modules, learning one module weekly and then provided reflection on each module under supervision of researchers or LCM team members as facilitators. *Secondly*, participants

shared their knowledge from their learning together as well as experiences in the "Knowledge Sharing" forum (Online Interaction). *Lastly*, each participant developed a mini innovative project or creative work task based on the course component. After completed three activities, the participants came to participate in the face-to-face intensive seminar. At the end of this step, it was discovered only forty nine (n=49) participants studied in the online course at least one module.

Step 3: The training course was evaluated by participants. The development of the research tool, questionnaire, was based on Monterey Institute for Technology and Education (2010). The questionnaire was verified by 3 experts, and then was sent to the participants (See Appendix C) 50% (n=37) of participants returned completed questionnaires via email within 3 weeks after received.

## **Data Analyses**

Descriptive statistic was used to analyze quantitative data, and content analysis for the qualitative open ended questions and participants' feedback from "knowledge sharing" forum.

### **Ethical Considerations**

This study was approved by the Human Research Ethics Committee of the School of Nursing, Sukhothai Thammathirat Open University in Thailand No 39. The research leader informed participants about the purposes and procedures of the study and then provided research informed consent as well as research consent form. Participants had been informed that they were research subjects and they had the right to withdraw their permission to be involved and their given information to be used.