

CHAPTER III

RESEARCH METHODOLOGY

The study was intended to explore students' English reading anxiety and CALL anxiety in blended learning. Chapter Three explains the research methodology consisting of the participants, the research design, the research instruments and instrumentations, the validity and reliability of the instruments, the collection of data, and the analysis of data.

Participants

The participants for the current study consisted of 75 third-year students majoring in Biology, who enrolled in the Reading Academic English course in the first semester of the academic year 2011 at Naresuan University, Phitsanulok. They are all native speakers of Thai. They attended two required English courses (Fundamental English and Developmental English) at the university before attending this course. They were selected through the purposive sampling technique.

All of the students were asked to answer the research questions from the FLRAS and the CALL Thoughts Survey for both language anxiety and computer anxiety after the seventh week of studying in the reading course. After that, seven students were selected to ask about their perceptions towards using e-learning in their reading course by frequency of e-learning use.

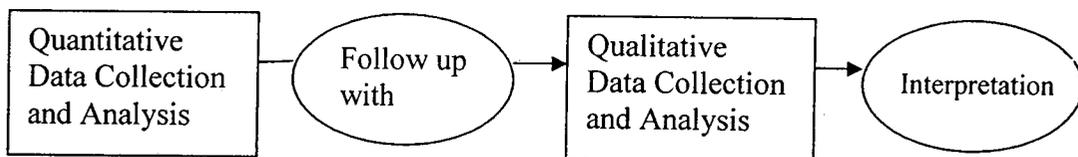


Figure 1 The Explanatory Sequential Design

Source: Creswell and Plano Clark, 2011, p.69

Research Design

In order to answer the research questions for this thesis, the mixed methods design by Creswell, et al. (2003 as cited in Creswell and Plano Clark, 2011, p.57) was used. The explanatory sequential design is a mixed methods design in which the researcher begins by conducting a quantitative phase and follows up on specific results with a second phase (see Figure 1). The second qualitative phase is implemented for the purposes of explaining the initial results in the more depth (Creswell and Plano Clark, 2011, p. 82). The intent of this two-phase, sequential mixed methods study was to explore in-depth perceptions of students towards using e-learning in their blended learning. In the first phase, quantitative research questions addressed the foreign language reading anxiety and CALL anxiety with 75 third-year students majoring in Biology, who enrolled in the Reading Academic English course in the first semester of the academic year 2011 at Naresuan University, Phitsanulok. Information from this first phase explored further in the second qualitative phase. In the second phase, qualitative interview was used to probe significant perceptions of the students with seven respondents who were selected according to their frequency of e-learning use above the average time. The reason for following up with qualitative research in the second phase was to illustrate the depth for quantitative data and to realize the diversity of the respondents views as well.

Research Instruments and Instrumentation

The research instruments used in the study consist of the Foreign Language Reading Anxiety Scale (FLRAS), the CALL Thoughts Survey, and a focus group interview.

1. The Foreign Language Reading Anxiety Scale (FLRAS): The respondents were asked here to indicate the feeling when reading a foreign language. It was developed by Saito, Horwitz and Garza in 1999. The FLRAS (see Appendix A) was modified by the researcher to suit the Thai context and translated into Thai to avoid ambiguity. The scale consisted of 10 items referring to the feeling about reading. It was scored on a 5-point Likert Scale, ranking from “strongly agree” to “strongly disagree”.

2. The CALL Thoughts Survey (see Appendix B): The respondents were asked to indicate how often they had the specified thoughts when they used an e-learning in their English reading course. This instrument was modified from the Computer Thoughts Survey (CTS) which developed by Weil and Rosen in 1988. The instrument consisted of 20 items on a 5-point Likert Scale, ranking from “not at all” to “very much”. The questionnaire was translated to Thai to avoid ambiguity.

3. A focus group interview (see Appendix C): an interview protocol was used in order to explore in-depth perceptions of students towards using e-learning in their blended learning. A group of seven students was selected according to their frequency of e-learning use. They were students who used e-learning above the average time.

The procedures for the development of the research instrument were as follows:

1. The researcher reviewed the literature about foreign language reading anxiety and computer assisted language learning anxiety.

2. The researcher modified the Foreign Language Reading Anxiety Scale (FLRAS) which was developed by Saito, Horwitz and Garza in 1999 and the CALL Thoughts Survey which was developed from the Computer Thoughts Survey (CTS) by Weil and Rosen in 1988. However, the focus group questionnaire was created by the researcher.

3. The researcher consulted the thesis advisor on language and content validity.

4. The drafts of the questionnaires were modified and corrected based on the suggestions of the thesis advisor.

5. The drafts of the questionnaires were submitted to experts from Western Languages Department, Faculty of Humanities, Naresuan University to examine the content validity, the face validity, the clarity, and the appropriateness of the language.

6. The researcher revised the questionnaires according to the suggestions of the experts.

Validity and Reliability

To ascertain the validity, the items on the FLRAS and the CALL Thoughts Survey were translated and the survey questionnaires were written in Thai to avoid ambiguity. Moreover, the teacher informed students that the questionnaires were not related to grading to prevent the bias in answering the questionnaires. Furthermore, the statements in the questionnaires were checked by the advisor of this thesis and the experts in language teaching before being administered to the students.

To ensure the reliability, the reliability coefficients (Cronbach's alpha, $n=75$) for the FLRAS and the CALL Thoughts Survey were computed to check the reliability of the questionnaires. The reliability coefficient for the FLRAS was .85; similarly, the previous study showed an internal consistency coefficient of .86 (Saito, Horwitz and Garza, 1999). This finding compares sensibly well with the result of .83 for the CALL Thoughts Survey which was reasonable with the results of 0.81-0.93 obtained from the study of Rosen and Weil (1992) and .87 from the study of Korukonda A. R. (2007). This meant that the questionnaires were highly reliable.

Collection of Data

The Reading Academic English course was taught in the first semester of 2011 for 15 weeks, but only the first seven weeks were included in the research. All 75 students were exposed to the blended learning context which is the combination of traditional face-to-face in-class instruction and e-learning for their supplementary activities to the course. According to Sharma and Barrett (2007), the crucial element in blended learning is an appropriate balance of face-to-face teaching and technology use; therefore, the students for this research took the traditional face-to-face in-class instruction for 75 percent and they took the other 25 percent for online learning.

In the case of online material, they used a reading made material from commercial textbook and they did supplementary activities through module. However, it was not a module itself; it provided some other online learning facility such as the online dictionary on it. The teacher explained the chapter content and then let students do the exercises themselves and gave suggestions when problems occurred. The online course components were described and the instructions on how to use the course components were also posted on the website, as well as instructed in class. Several

websites which were related to the reading skills for each week were added on the e-learning. The links contained reading passages, vocabulary exercises, and reading skill exercises related to the face-to-face material. The students checked the reading links and did the exercises online.

The first week of the course was the preparation period. The students learned to use the e-learning system effectively. Throughout the semester, the teacher acted as a facilitator. She contributed technical support on the online learning and always responded to comments and requests of the students. According to the mixed methods design, the researcher separated the collection of data in two phases.

Phase 1

After seven weeks of the reading course, all 75 students were asked to complete the Foreign Language Reading Anxiety Scale (FLRAS) and the CALL Thoughts Survey.

Phase 2

After completing the FLRAS and the CALL Thoughts Survey, participants were selected for a focus group interview for in-depth perceptions towards using e-learning in their reading course. The average time of using e-learning were computed. The statistics showed that there were seven students used e-learning above the average time. Then, these seven students were asked in the focus group interview about their perceptions towards using e-learning in their reading course in natural conversation for seven open-ended questions. There was an interaction among students in the group. The interviewer acted as a moderator during the interview.

Analysis of Data

Data analysis focused on the English reading anxiety and CALL anxiety in a blended learning. In order to analyze the data, students were asked to complete the Foreign Language Reading Anxiety Scale (FLRAS) to answer the research question number one. For the research question number two, students were asked to answer the CALL Thoughts Survey. Focus group interview was asked to answer the research question number three.

The CALL Thoughts Survey model specified 11 items (items 1, 3, 6, 7, 9, 12, 13, 15, 17, 19, 20) loading on the negative learning cognition factors when using e-learning, five items (items 8, 10, 11, 14, 18) loading on the positive learning cognition factors, and four items (items 2, 4, 5, 16) loading on the enjoyment factor. The factors were specified to be free to correlate, and no cross-factor loadings were specified.

For statistical analysis the responses were coded and analyzed. Statistical methods which were used in analyzing the data were percentage, mean, and standard deviation (S.D.). All of them were used to analyze and present the level of reading anxiety and CALL anxiety.

To interpret mean of foreign language reading anxiety, five scales were used as follows.

1.00-1.50 = extremely low

1.51-2.50 = low

2.51-3.50 = moderate

3.51-4.50 = high

4.51-5.00 = extremely high

In order to group according to computer anxiety, Rosen and Weil (1995) proposed three progressively higher levels of computer anxiety: none or very low, low to moderate, and high. However, the researcher used the same range but changed the interpretation for more precise and understandable as follows.

1.00-2.33 = low

2.34-3.66 = moderate

3.67-5.00 = high

Furthermore, to reveal in-depth perceptions of students towards using e-learning in their reading course, focus group interview was used in the study. Data derived from the interview protocol was transcribed and reported into themes raised by the interview participants. In addition, the data obtained from the interview protocol included a thorough description of the themes and multiple perspectives from participants to support these themes as well.