แบบจำลองการเรียนรู้ผ่านสื่ออิเล็กทรอนิกส์เพื่อเพิ่มพูนทักษะการนำเสนอด้วยวาจาเป็นภาษาอังกฤษสำหรับพยาบาลจิตเวชไทย

นางสาวเบญญาภา ทำสะดวก

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต
สาขาวิชาภาษาอังกฤษศึกษา
มหาวิทยาลัยเทคโนโลยีสุรนารี
ปีการศึกษา 2557

AN ENGLISH ORAL PRESENTATION SKILLS ENHANCEMENT E-LEARNING MODEL FOR THAI REGISTERED PSYCHIATRIC NURSES

Benyahpa Tumsaduak

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts in English Language Studies

Suranaree University of Technology

Academic Year 2014

AN ENGLISH ORAL PRESENTATION SKILLS ENHANCEMENT E-LEARNING MODEL FOR THAI REGISTERED PSYCHIATRIC NURSES

Suranaree University of Technology has approved this thesis submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy.

Thesis Examining Committee

_____

(Dr. Dhirawit Pinyonatthagarn)

Chairperson

_____

(Dr. Suksan Suppasetseree)

Member (Thesis Advisor)

_____

(Dr. Peerasak Siriyothin)

Member

_____

(Dr. Butsakorn Yodkamlue)

Member

_____

(Prof. Dr. Sukit Limpijumnong)

Vice-Rector for Academic Affairs and Innovation

_____

(Dr. Peerasak Siriyothin)

Dean of Institute of Social Technology

เบญญาภา ทำสะดวก : แบบจำลองการเรียนรู้ผ่านสื่ออิเล็กทรอนิกส์เพื่อเพิ่มพูนทักษะการนำเสนอด้วยวาจาเป็นภาษาอังกฤษสำหรับพยาบาลจิตเวชไทย (AN ENGLISH ORAL PRESENTATION SKILLS ENHANCEMENT E-LEARNING MODEL FOR THAI REGISTERED PSYCHIATRIC NURSES) อาจารย์ที่ปรึกษา : อาจารย์ ดร.สุขสรรพ์ ศุภเศรษฐเสรี, 213 หน้า

วัตถุประสงค์ของงานวิจัยในครั้งนี้คือ 1) เพื่อพัฒนารูปแบบจำลองการเรียนรู้สำหรับใช้ในการออกแบบและสร้างบทเรียนอีเลิร์นนิงภาษาอังกฤษสำหรับพยาบาลจิตเวช 2) เพื่อหาประสิทธิภาพของบทเรียนอีเลิร์นนิงภาษาอังกฤษสำหรับพยาบาลจิตเวช โรงพยาบาลนครราชสีมาราชนครินทร์ ที่พัฒนาขึ้นตามเกณฑ์มาตรฐาน 80/80 3) เพื่อเปรียบเทียบผลสัมฤทธิ์ทางการเรียนของพยาบาลจิตเวชก่อนและหลังเข้าเรียนผ่านบทเรียนอีเลิร์นนิงภาษาอังกฤษสำหรับพยาบาลจิตเวช และ 4) เพื่อศึกษาความคิดเห็นของพยาบาลจิตเวชที่มีต่อการเรียนผ่านบทเรียนอีเลิร์นนิงภาษาอังกฤษสำหรับพยาบาลจิตเวช

การวิจัยครั้งนี้เป็นการวิจัยเชิงทดลองแบบการทดสอบก่อนและหลัง กลุ่มตัวอย่างของการวิจัยครั้งนี้ คือ พยาบาลจิตเวชที่ปฏิบัติหน้าที่ในหอผู้ป่วยใน จำนวน 30 คน โดยพยาบาลจิตเวชได้ทำการทดสอบก่อนเรียนโดยการทดสอบทักษะการพูด จากนั้นจึงเรียนผ่านบทเรียนอีเลิร์นนิงภาษาอังกฤษสำหรับพยาบาลจิตเวช หลังจากการเรียนเสร็จสิ้น พยาบาลจิตเวชทำการทดสอบหลังเรียนโดยการทดสอบทักษะการพูด แล้วจึงตอบแบบสอบถามและได้รับการสัมภาษณ์ สถิติที่ใช้ในการวิเคราะห์ข้อมูล ได้แก่ ค่าเฉลี่ย (Mean) ค่าเบี่ยงเบนมาตรฐาน (Standard Deviation) ค่าร้อยละ (Percentage) การทดสอบ t-test การทดสอบความสอดคล้อง Pearson และ การวิเคราะห์เนื้อหา (Content Analysis) ผลวิจัยพบว่า

1. รูปแบบจำลองการเรียนรู้สำหรับใช้ในการออกแบบและสร้างบทเรียนอีเลิร์นนิงภาษาอังกฤษสำหรับพยาบาลจิตเวชประกอบไปด้วยขั้นตอนหลัก 6 ขั้นตอน และขั้นตอนย่อย 12 ขั้นตอน
2. บทเรียนอีเลิร์นนิงสำหรับพยาบาลจิตเวชที่พัฒนาขึ้นมีค่าประสิทธิภาพ ตามเกณฑ์มาตรฐาน 80/80
3. ผลสัมฤทธิ์ทางการเรียนภายหลังจากการเรียนผ่านบทเรียนอีเลิร์นนิงสำหรับพยาบาลจิตเวชสูงกว่าก่อนการเรียนผ่านบทเรียนอีเลิร์นนิงอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.00
4. พยาบาลจิตเวชมีความพึงพอใจต่อบทเรียนอีเลิร์นนิงอยู่ในระดับ “สูง” และมีความพึงพอใจต่อการเรียนผ่านบทเรียนอีเลิร์นนิงในระดับ “มากที่สุด”

สาขาวิชาภาษาต่างประเทศ ลายมือชื่อนักศึกษา _____

ปีการศึกษา 2557 ลายมือชื่ออาจารย์ที่ปรึกษา _____

BENYAHPA TUMSADUAK : AN ENGLISH ORAL PRESENTATION SKILLS ENHANCEMENT E-LEARNING MODEL FOR THAI REGISTERED PSYCHIATRIC NURSES . THESIS ADVISOR : SUKSAN SUPPASETSEREE, Ph.D., 213 PP.

ADULT LEARNING/E-LEARNING/PSYCHIATRIC NURSING/ENGLISH IN THE WORKPLACE

The purposes of this study were 1) to develop the modified ISD model for designing and constructing the English for Psych Nurses (EPN) program, 2) to examine the efficiency of the EPN program based on the 80/80 standard criterion; 3) to investigate whether, after using the EPN program, the registered psychiatric nurses can improve their oral presentation skills on giving shift reports; and 3) to explore the psychiatric registered nurses' attitudes toward learning through the EPN program.

This study was a quasi-experimental single group pretest/posttest study. The sample in this study was 30 registered psychiatric nurses who worked in the inpatient department at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital. First, the registered psychiatric nurses who participated in the study took an oral posttest before learning through the English for Psych Nurses program. Then, they performed an oral posttest after completing the English for Psychiatric Nurses program. Last, the registered psychiatric nurses completed the questionnaire and answer semi-structured interview questions. The data were analyzed using Statistical Package for the Social Sciences (SPSS) for analyzing descriptive statistics such as mean scores, standard deviations, percentage and inferential statistics such as paired sample T-test, the Pearson product-moment correlation, and content analysis. The findings of this research were as follows:

1. The modified ISD module for designing and constructing the EPN module consisted of six major phases and twelve steps.
2. The EPN program was effective based on the 80/80 standard criterion. The scores from the E1/E2 were 84.72/85.56.
3. The oral performance scores between the pretest and the posttest were statistically significant different at p<.00 where the posttest score is higher.
4. The registered psychiatric nurses (RPNs) believed the English for Psych Nurses program was "appropriate" ($\bar{x}$ = 4.15) and they had "very positive attitudes" ($\bar{x}$ = 4.51) towards learning though the EPN program.

School of Foreign Languages Student's Signature _____

Academic Year 2014 Advisor's Signature _____

ACKNOWLEDMENTS

I wish to express my appreciation to individuals who guided and supported me until completion of this thesis.

First, I would like to express my most sincere gratitude to my thesis supervisor, Dr. Suksan Suppasetseree, for his considerable encouragement and wholehearted support over the years. Working under his supervision has been an invaluable experience. His complete dedication to me was paramount and I cannot thank him enough. I have greatly benefited from his advice and guidance regarding this research.

I am also grateful to my committee members, Dr. Dhirawit Pinyonatthagarn, Dr. Peerasak Siriyothin, and Dr. Butsakorn Yodkumlue for their dedicated time, reviews, critiques, questions, and guidance. Their comments and suggestions helped shape this thesis. Special thanks also go to Dr. Sirinthorn Sripho and the three secretaries at the School of Foreign Languages who have impulsively offered their help whenever I needed it. I appreciate the support and sincere friendship of my fellow students in SUT. We have been through great times together and I value our friendship most.

I would very much like to thank the experts and the nurse educators for their great advice on the instruments. I also appreciate the help and support from the administrators of Nakhon Ratchasima Rajanagarindra Psychiatric Hospital, particularly the Nursing Division. I am grateful to all the staff nurses who actively participated in the study for their time and effort.

Finally, this research would not have been possible without all the love and support of my family, particularly to my beloved mother who has always been there for me for these years. I have no better word to express, except that I owe her for everything that she has done for me. My dad who has always shown through his smiles and sparkling eyes how proud he was every time I told him about my progress and positive feedback from my supervisor. I honestly have so many people I would like to thank for their love and support. Thank you for always being there for me.

Benyahpa Tumsaduak

TABLE OF CONTENTS

Page

TABLE OF CONTENTS (Continued)

Page

TABLE OF CONTENTS (Continued)

Page

TABLE OF CONTENTS (Continued)

Page

TABLE OF CONTENTS (Continued)

Page

LIST OF TABLES

Table **Page**

LIST OF TABLES (Continued)

Table **Page**

LIST OF FIGURES

Figure **Page**

LIST OF ABBREVIATIONS

AEC	=	ASEAN Economic Community
ASEAN	=	Association of Southeast Asian Nations
EAP	=	English for Academic Purposes
EFL	=	English as a Foreign Language
EOP	=	English for Occupational Purposes
EPN	=	English for Psych Nurses
ESL	=	English as a Second Language
ESP	=	English for Specific Purposes
IPD	=	Inpatient Department
ISD	=	Instructional Systems Design
OPD	=	Outpatient Department
RPN	=	Registered Psychiatric Nurse
SDL	=	Self-Directed Learning
SL	=	Situated Learning
SREO	=	Suppasetseree's Remedial English Online

CHAPTER 1

INTRODUCTION

This chapter provides an overview of the present study which focuses on developing a modified Instructional Systems Design (ISD) model which is used as a framework for designing and constructing an online English for Psychiatric Nurses (EPN) program for Thai registered psychiatric nurses (RPNs) to enhance their oral presentation skills in English which are needed in handing over shift reports on patients with paranoid schizophrenia. The introduction presents the background of the study, the reasons why English plays an important role in the nursing field in Thailand, the rationale behind the needs to develop the modified ISD model, the English for Psychiatric Nurses (EPN) program, the purposes, the research questions, the scope, and the definitions of the key terms used in this study.

1.1 Background of the Study

It is obvious that not every language can be claimed to be the language of the world, but English is widely recognized as the international tongue, even though it is not spoken by every person and is certainly not made an official language by every country. David Crystal (1997), a British linguist, explains that there are two possible ways to make a language “a global language”. First, the language can be established as a first or second official or semi-official language for use in various forms of communication. He claims that at least 70 countries declare English as an official or

semi-official language. The de facto adoption of English as a sole language can be seen in countries such as the United States, the United Kingdom and Australia. In Southeast Asia, the Philippines and Singapore are two countries where English serves as a second official language for communication for approximately 107,000,000 and 5,500,000 people respectively (Central Intelligence Agency, 2014).

Second, a language can be entitled a global language if it receives priority in education in most nations, for example, as a compulsory subject. According to the statistics on the most commonly studied foreign languages in European countries, as cited in the Eurostat News Release (2013), all students in the Czech Republic, France, the Netherlands, Slovenia, Finland, Sweden and Liechtenstein are required to learn English in general programs. In Southeast Asia, Singapore, the Philippines, Malaysia, Vietnam, Laos and Thailand are among several other countries where English is included in the foreign language curriculum (Kirkpatrick, 2011). In Thailand, English is viewed as the first foreign language that is mandatorily taught to Thai students. The Basic Education Curriculum has put greater importance on learning English by placing it in the core curriculum at all three levels of education: primary, secondary, and tertiary since 2001 (Ministry of Education, 2006). Although Thais learn English as a compulsory subject in school, many still encounter difficulty mastering English, particularly in terms of communication, as a result of English being taught mostly in a "foreign", not a "second" or a "first" language environment.

Graddol (2000) categorizes English speakers into 3 types: first-language (L1); second-language (L2); and English as a foreign language (EFL). As recent statistical surveys into English usage of the three types are scarce, he estimated that by the 21st century, speakers of EFL would outnumber the first and second language speakers

combined. Support for this claim is evident as English is ranked as the third most common language spoken by approximately 340,000,000 people while Mandarin Chinese and Hindi by over a billion (Ethnologue, 2000). It is apparent that the majority of Chinese and Indian people do not use English like people in English L1 and L2 countries do. According to Graddol (2000), "English is not used simply as a 'default' language; it is often used because it is culturally regarded as the appropriate language for a particular communicative context" (p. 12). Hence, English does not belong to any particular country or dominate as a world language merely because it earns the official status in over 70 countries and has educational priority. Rather, it is widely accepted as a working language in both academic and general discourses, such as in medicine, economics, science, technology and everyday communication (Nga, 2008).

At present, teaching and learning English is not necessarily confined to only educational institutions. In Thailand, many organizations, such as hospitals, hotels, business firms, and factories have increasingly been investing in developing language proficiency, particularly English, for their staff members. This may be partially due to the official agreement on making English a working language signed by members of the Association of Southeast Asian Nations (ASEAN) for harmonious collaboration in forming a single market in the region. The Association of Southeast Asian Nations (ASEAN) was primarily formed by Indonesia, Malaysia, the Philippines, Singapore, and Thailand in 1967. Brunei, Vietnam, Lao PDR, Myanmar and Cambodia then joined the organization in the latter years. ASEAN aims to accelerate economic growth, social progress, and cultural development and foster regional peace and stability among its members. In 2007, three pillars of ASEAN Community: the ASEAN Political-Security Community, the ASEAN Economic Community and the ASEAN Socio-Cultural

Community were established. The materialization of the ASEAN Economic Community (AEC) is crucial as the region needs to proceed with the free movement of goods, investment, services and, especially, skilled labor in 2015 (ASEAN, 2011; UTCC, 2012).

To ensure the successful mobility of skilled labor in eight fields (Engineering Services, Nursing Services, Architectural Services, Surveying Qualifications, Accountancy Services, Dental Practitioners, Medical Practitioners, and Tourism), ASEAN Economic Ministers unanimously signed the Mutual Recognition Arrangements (MRA). Qualifications, such as educational degrees and length of experience, have been proposed for which the issue of appropriate licenses or certificates to allow people permission to work easily and legally in the member countries. However, merely holding required degrees or having adequate years of work experience will not guarantee that skilled Thai labor will be able to compete against skilled labor from other member countries if the ability of Thai labor to communicate in English is still in question.

A report pertaining to the level of English proficiency in countries where the language is spoken as a second or foreign language was issued in the third edition of the EF English Proficiency Index (EF EPI) in 2013 by Education First (EF), an international education company specializing in language training, academic programs and cultural exchange. The report measured English proficiency level in 60 different countries from data gathered from about five million adults who used the company's English tests over a six year period (2007 - 2012). The proficiency levels are labeled as Very High Proficiency, High Proficiency, Moderate Proficiency, Low Proficiency, and Very Low Proficiency. The study included Indonesia, Malaysia, Singapore, Vietnam,

and Thailand, but excluded the Philippines due to the high number of foreign-born Canadians in the population. Among the five member countries in ASEAN, Malaysia and Singapore were ranked in the category of High Proficiency (11 and 12), Indonesia and Vietnam in the category of Moderate Proficiency (25 and 28) while Thailand was placed at 55 in the Very Low Proficiency category.

The results contributed by Education First (2013) regarding the English proficiency level of Thai people were consistent with the local release of a 2012 analysis of Thai skilled labor and the AEC by the Center for International Trade Studies, University of the Thai Chamber of Commerce (UTCC). This analysis emphasized the urgent need to improve the English skills of the Thai labor force. It highly recommended that skilled Thai workers are strongly encouraged to develop English communication skills so that they will be able to compete with workers from the Philippines, Singapore, Malaysia and Indonesia who already have a huge advantage in English proficiency. According to the report, the potential of Thai professionals in all fields under ASEAN is generally places them high in the rankings leaving the Thais worry-free in terms of required qualifications. In Nursing Services, for example, the potential of Thai registered nurses is found to have the highest as the majority have obtained a four-year bachelor's degree. Despite the level of education, the lack of fluency in English communication skills seems to remain a serious negative factor for most nurses in Thailand when compared to English-speaking nurses from the Philippines and Singapore (Chia, 2011).

In order to help promote successful professional development in language learning for registered nurses, it is important to take into account the obstacles that may hinder them from learning English, especially in a classroom-based environment. These

include excessive work demands, work schedules, family responsibilities, a lack of dedicated time for personal and professional development, foreign language learning experiences, low motivation, and emotional factors, such as fear of failure and shyness (Phipps, Prieto, & Ndinguri, 2013; Twoney, 2004). Although personal barriers are not easily overcome, a problem regarding the lack of time for learning due to work demands and irregular work shifts for most registered nurses can possibly be addressed by the provision of a more flexible learning environment and the integration of technology, such as online learning, web-based learning, or e-Learning (Belcher & Vonderhaar, 2005; Gerkin, Taylor, & Weatherby, 2009; Saekow & Samson, 2011; Stephenson, Brown, & Griffin, 2008).

The advancement of technology, particularly the development of the Internet, has contributed to the growing popularity of the use of e-Learning over the past several years. Integrating technology into both education and training sectors has resulted in a wide adoption of e-Learning in the nursing field (Abdelaziz, Kamel, Karam, & Abdelrahman, 2011; Ajayi & Ajavi, 2006; Liang & Wu, 2010; Liang, Wu, & Tsai, 2011; Vittrup & Davey, 2010). It should be noted that, for nurses, restrictions such as workload, work schedules, and personal and professional commitments are different for each individual. Therefore, acquiring new, additional knowledge and skills needed in the organization of a traditional classroom may not be easily achieved compared to an online learning environment.

Evidence gathered from several studies on e-Learning in the nursing field reveals that e-Learning not only benefits from a more flexible and convenient learning schedule in terms of time and place, but it also develops self-direction for lifelong learning, fulfills personal and professional development needs, accommodates different

learning styles, and promotes positive attitudes toward learning (Atack & Rankin, 2002; Chang, Sheen, Chang, & Lee, 2008; Gerkin et al., 2009; Karaman, 2011; Nelson, 2003; Yu, Chen, Yang, Wang, & Yen, 2007). Thus, based on these aforementioned positive findings, it is suggested that e-Learning be adopted for registered nurses, so that they can be given an opportunity to obtain the necessary knowledge and skills to increase their personal and professional development despite all the learning constraints. In this study, the English for Psychiatric Nurses (EPN) program will be designed, developed and implemented to facilitate English language learning for Thai registered psychiatric nurses (RPNs) based on a modified Instructional Systems Design (ISD) model.

1.2 Rationale of the Study

Registered psychiatric nurses (RPNs) at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital have been offered conventional face-to-face courses annually to develop their English skills. However, based on the data the researcher gathered from interviewing nurse administrators and RPNs, there are a few reasons that suggest that the traditional courses may not be suitable for the nature of the RPNs' work and their needs. First, quite a number of RPNs could not fully participate or participate in the former traditional courses due to constraints such as excessive workloads and irregular work schedules. Second, the traditional courses only provide paper-based materials, such as handouts and worksheets, so if the materials are lost or damaged, the RPNs may not be able to review or relearn them. Last, Thai is the main language used at the hospital and there are not many foreign patients, so there are very few opportunities for the RPNs to practice or use English at work.

For the fiscal year 2013, the hospital administrators planned to provide more opportunities for the RPNs to practice and use English within psychiatric contexts (i.e., discussing patients' conditions and handing over shift reports) by proposing an English course to help prepare its RPNs to be professionally ready for the forthcoming ASEAN Economics Community (AEC) in 2015. The course offered a three-day face-to-face workshop on "Nursing Process and Documentation for Mental Health Nurses". Two nurse educators from Boromarajonani College of Nursing, Praputthabat instructed the whole course mostly in English. The nurse educators were highly proficient regarding knowledge in psychiatric and mental health nursing and their English language levels, but, most of the RPNs, who have a low level English proficiency, appeared to have difficulties recognizing pronouncing vocabulary, and understanding the grammatical structures required for giving verbal shift reports.

Based primarily on the researcher's observations and the RPNs' feedback, most RPNs who participated in the workshop believed learning about nursing processes and documentation positively promoted their English for professional development. However, most of them encountered problems attempting to give verbal reports in English because they had insufficient vocabulary, phrases, and grammar knowledge. Hence, in order for the RPNs to be able to give verbal shift reports in English, they need to gain more knowledge of vocabulary and grammar. Also, the integration of four skills in one course seems ostensibly too difficult for a number of RPNs owning to their low level of English proficiency. Furthermore, giving shift reports does not always require two-way communication, so the one skill targeted in this study is the improvement in English necessary for giving shift reports using oral presentation skills.

It is worth taking into consideration that the RPNs have diverse English language learning backgrounds. It can be assumed that most of the RPNs have low English proficiency because they rarely have a chance to practice English since Thai is the sole language used at the workplace. For this reason, they may have inadequate knowledge and low confidence when it comes to using English. Apart from having a rare opportunity to improve the language, learning, particularly in a conventional classroom, requires the dedication of considerable time, but the RPNs normally have heavy workloads and irregular work schedules. For these reasons, providing English language training by means of a traditional classroom-based course may yield less satisfying learning outcomes. Hence, an online course may be considered an alternative that facilitates the learning of the RPNs who have different levels of English proficiency and it would suit their needs and working conditions better if they were able to learn in a more flexible learning program.

As this study aims at allowing the RPNs to take control over their learning both individually and independently and to participate in a meaningful learning situation in order to enhance their oral presentation skills for professional development, a modified ISD model will be developed by the researcher as a framework for designing and constructing an online English for Psychiatric Nurses (EPN) program. The modified ISD model and the EPN program will be evaluated by experts in the fields of English Language Teaching, Psychiatric and Mental Health Nursing, and Instructional Systems Technology. The accuracy and appropriacy of the contents and materials used in the EPN program will also be verified, evaluated and approved by experts in the fields of English Language Teaching and Psychiatric and Mental Health Nursing.

The researcher studied the principles of Andragogy, the constructivist theory, Self-Directed Learning (SDL), and Situated Learning (SL) and then adopted the theory of Instructional Systems Design (ISD) to develop a modified ISD model for constructing the EPN program. The contents and materials of the EPN program are delivered on a Learning Management System (LMS) platform called CourseSites by Blackboard™ for the RPNs to independently learn online. For measurement and evaluation, first, the modified ISD model will be approved by the expert in the field of Instructional System Technology. Second, the efficiency of the EPN program will evaluated according to the 80/80 standard criterion. Third, the oral presentation skills performances on giving verbal shift reports before and after using the EPN program will be measured by two raters based on the criteria in the scoring rubric. Last, the attitudes toward learning by means of the EPN program will be obtained using a questionnaire and interview questions.

The RPNs at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital are encouraged to improve their English by practicing their English when giving shift reports . However, not only do the RPNs have great difficulty in doing this because they have inadequate vocabulary, phrases, and grammar to form comprehensible sentences for shift reports, there are also very limited resources available for them to learn from. Furthermore, due to heavy workloads and irregular work schedules, it is seemingly inconvenient for the RPNs to fully participate in a traditional face-to-face course. For these reasons, there is a need to produce an online course to allow the RPNs to learn to give shift reports in English through the adoption of a more flexible program.

To the best of the researcher's knowledge, very few studies have been conducted on Thai psychiatric nurses who need to learn English specifically for

professional development and none at all on online English courses that aim to improve oral presentation skills when giving shift reports within a psychiatric context, specifically for patients with paranoid schizophrenia.. Thus, it will be necessary and very useful to develop a modified ISD model for use as a framework to design and construct an online English program for Psychiatric Nurses (EPN) in order to enhance the oral presentation skills of Thai RPNs so that they can give verbal shift reports on patients with paranoid schizophrenia.

1.3 Purposes of the Study

The four purposes of this study are as follows:

1. to develop a modified Instructional Systems Design (ISD) model for designing and constructing an English for Psychiatric Nurses (EPN) program to enhance the oral presentation skills of Thai registered psychiatric nurses (RPNs);
2. to examine the efficiency of the EPN program based on the 80/80 standard criterion;
3. to investigate whether, after using the EPN program, the RPNs improve their oral presentation skills on giving shift reports; and
4. to explore the RPNs' attitudes toward learning through the EPN program.

1.4 Research Questions

Four research questions are addressed to accomplish the purposes of this study.

1. What are the components and steps of developing a modified Instructional Systems Design (ISD) model for the English for Psychiatric Nurses (EPN) program?
2. Is the EPN program efficient based on the 80/80 standard criterion?
3. What is the effect of the EPN program on the oral presentation skills of the registered psychiatric nurses?
4. What are the attitudes of the registered psychiatric nurses toward learning through the EPN program?

1.5 Definitions of Key Terms

The definitions of key terms used in the study are as follow:

1. **"The modified ISD model"** or "the modified Instructional Systems Design model" refers to an instructional system design model which is modified by the researcher based on the principles of Andragogy, constructivism, Self-Directed Learning (SDL), Situated Learning (SL), and theory and models of the Instructional Systems Design (ISD). The modified ISD model comprises six phases and twelve steps in designing and constructing the online English for Psychiatric Nurses (EPN) program for Thai registered psychiatric nurses to enhance their oral presentation skills in English on giving shift reports on patients with paranoid schizophrenia.

2. **"The EPN program"** or "the English for Psychiatric Nurses program" refers to a set of applications which uses available multimedia to electronically deliver learning content, materials, and objects through the Internet on personal or portable computers to allow a more flexible learning environment for the registered psychiatric nurses (RPNs) at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital who are encouraged to give verbal shift reports in English. The researcher designed and constructed the EPN program by following the phases and steps in the modified ISD model and using web design tools such as Adobe Reader, Adobe Photoshop, and Audacity. The EPN program is delivered on the Learning Management System (LMS) called CourseSites by Blackboard™. The contents are based on authentic materials such as nursing notes and shift reports. The EPN program consists of five modules: (1) Schizophrenia, (2) Paranoid Schizophrenia, (3) Violence and Escape, (4) Depression and Suicide Risk, and (5) Information Transfer.
3. **"RPNs"** refers to 70 registered psychiatric nurses who participated in the workshop on "Nursing Process and Documentation for Mental Health Nurses". They work at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital in departments such as the inpatient department (IPD), the outpatient department (OPD), and the child and adolescence psychiatric department. The majority of the RPNs work in five in-patient wards:
   (1) Phirunthong, (2) Pakakrong, (3) Krongjit, (4) Bhuddaraksa, and
   (5) Feungfah.

4. **"Nursing shift reports"** refers to the exchange of information between offgoing and oncoming RPNs at the end of each of three shifts regarding the care processes for the patients. The information generally includes patient identification, history, conditions, care given during the previous shift, care planned over the next shift and other pertinent information such as a psychiatrist's comments, special precautions, medical treatment, and nursing interventions. Two shift report forms in English used in this study were developed by the hospital. The first form is for reporting the overall information of the shift (e.g., information on patient admission, discharge and special precautions) and the second is for describing individual case regarding nursing diagnosis, treatment and care, and evaluation.
5. **"Schizophrenia"** refers to "a major psychiatric disorder, or cluster of disorders, characterized by psychotic symptoms that alter a person's perception, thoughts, affect and behaviour" (Barbato, 1998). The content, exercises, and tests for the e-Learning program involves vocabulary and phrases frequently used to describe and report signs, symptoms, and conditions of patients who are diagnosed with schizophrenia regarding their perception, thoughts, affect, and behavior.
6. **"Andragogy"** refers to a specific theoretical and practical approach to the learning of adults based on a humanistic conception of self-directed and autonomous learners and instructors as facilitators of learning (Reischmann, 2004). The study adopts the model of adult learning or andragogy proposed by Knowles, Holton, and Swanson (2005). The model consists of six assumptions: (1) learner's need to know; (2) learner's self-concept; (3) role

of prior experience; (4) readiness to learn; (5) orientation to learning; and (6) motivation.

7. **"80/80 Criterion"** refers to a standard criterion determined from the ratio between the efficiency of the process and the effectiveness of the product by using E1/E2 formula in order to explore whether the EPN program is efficient. E1 or the first 80 indicates learners' average scores obtained from the exercises (practice) while E2 or the second 80 means the average scores gained from the tests (assessment) (Brahmawong, 1978).
8. **"Attitudes"** refers to the RPNs' feedback or opinions toward learning through the online EPN program.

1.6 Scope of the Study

The present study aims to develop a modified ISD model for designing and constructing an efficient English for Psychiatric Nurses (EPN) program for the Thai registered psychiatric nurses (RPNs), to investigate whether the EPN program can enhance the RPNs' oral presentation skills on giving shift reports, and to explore their attitudes toward the use of the EPN program. The study is conducted with 30 RPNs who work in the in-patient wards at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital. The RPNs have read and signed an informed consent letter to prove that they voluntarily agree to participate in the study. They are required to perform brief verbal shift reports before and after they learn through the EPN program. Once all of the RPNs complete every exercise and test in the five modules, they provide personal information and feedback for the questionnaire, and twelve of them are randomly selected to answer interview questions.

1.7 Significance of the Study

This study is significant in a number of ways.

First, using the modified ISD model can help the researcher to successfully design and construct an efficient English for Psychiatric Nurses (EPN) program which enhances the oral presentation skills for Thai registered psychiatric nurses (RPNs) to learn independently about giving shift reports on patients with paranoid schizophrenia in English online. This modified ISD model comprises easy-to-follow phases and steps that could also be used as a framework for designing and constructing a fully online course/program of any subject matter for any learners who require minimum instructions.

Second, the five-module EPN program is applicable to the RPNs at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital who want to learn more vocabulary, phrases, and grammar to form proper sentences for giving verbal shift reports on patients with paranoid schizophrenia. The EPN program provides vocabulary, grammar with sentence examples, and audio files that narrate the contents in each module to help the RPNs improve their English. The contents in five modules are offered in both electronic and printed versions for the RPNs to study both online and offline. The EPN program is also applicable to RPNs at other mental health hospitals and student nurses who are interested in learning how to give shift reports in English on patients with paranoid schizophrenia.

Last, although the materials in the EPN program were initially created to be specifically applicable to Thai RPNs who wished to learn English in order to be able to give verbal shift reports on patients with paranoid schizophrenia, the program can also be used for other purposes. The EPN program can be used to expand other skills, for

example, the contents, vocabulary, and sentence examples can be applied in teaching or learning to write nursing notes and reports. Also the EPN program can be a learning resource for Thais who want to learn English in the context of psychiatry or as a resource for learners who already know English, but are interested in learning about schizophrenia.

1.8 Summary

The administration at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital has annually provided traditional courses to help develop and improve the English skills of its registered psychiatric nurses (RPNs). Even though the RPNs have positive attitudes toward learning in a classroom-based environment, they still find it difficult to use English for their work-related situations since most of the courses offered are for general purposes rather than specific purposes. Also, most RPNs often have difficulty attending the traditional-style classes held at a fixed time and place due mainly to professional duties and responsibilities. Hence, to provide an alternative for learning, the modified ISD model is developed to be used as a framework for designing and constructing an EPN program for the RPNs at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital to enhance their oral presentation skills in English on giving shift reports on patients with schizophrenia. In the next chapter, learning theories, principles as well as related studies are discussed in detail.

CHAPTER 2

LITERATURE REVIEW

This chapter provides background information and reviews of related literature on developing a modified ISD model to enhance the oral presentation skills of Thai registered psychiatric nurses who learn English as a foreign language in an online environment. The literature review comprises seven parts: (1) the principles of adult learning, (2) the theoretical framework for the integration of Andragogy which includes constructivism, Self-Directed Learning (SDL), Situated Learning (SL), and English for Specific Purposes (ESP), (3) the needs to learn English of Thai nurses, (4) the principles of e-Learning, (5) the principles of Instructional Systems Design (ISD), (6) the Learning Management System (LMS) platform, and (7) related studies on e-Learning in the nursing field.

2.1 The Principles of Adult Learning

Regarding learning, adult learners are quite different from young learners for they do not feel obliged to maintain academic habits if what they are learning is basically irrelevant or they consider it to be unimportant to their life or work (Clawson & Haskins, 2006; Knowles et al., 2005). Furthermore, grades or rewards do not always encourage them into learning like as they for young learners. Since most adults tend to focus more on responsibilities in life and become more selective about learning, it is important to choose learning principles that specifically provide suitable learning

situations for them. Hence, in this study, the principles for adult learning or andragogy as proposed by Malcolm Knowles are selected as the main framework for this study and are reviewed in detail. The definitions and background, the assumptions, the strengths and weaknesses as well as the conceptual framework of the model of andragogy are discussed in the following sections.

2.1.1 Development of Andragogy

Andragogy was introduced into the field of teaching and learning over a century ago. The term was initially coined and documented in 1833 by Alexander Kapp, a German educator, and was subsequently used by numerous eminent educators and researchers across Europe and the United States, for example, Eugen Rosenstock-Huessy (1921), Eduard Lindeman (1926), Franz Pöggeler (1957), Dusan Savicevic (1966), Malcolm Knowles (1968), Jack Mezirow (1991), and Sharan Merriam (1999). Andragogy, which refers to a set of assumptions about how adults learn, was originally used by Kapp to described Plato's educational theory. Then in 1921, Rosenstock-Huessy asserted that special teachers, special methods, and a special philosophy are required for adult education. Even though the pioneer works of these two German educators, Kapp and Rosenstock-Huessy, are scantily discussed in the literature, it is evident that they greatly influenced several major figures in adult education throughout Europe and the United States in later years.

Lindeman, an American educator, proposed a paradigm shift in adult education from teacher-centered to learner-centered education in 1926. He described the learner in conventional education as directed to learn from an established curriculum, but the learner in adult education requires a curriculum based chiefly on their needs and interests. He emphasized the importance of progressive education by stating, "Adult

education will become an agency of progress if its short-term goal of self-improvement can be made compatible with a long-term, experimental but resolute policy of changing the social order" (Lindeman, 1988, p.105). Furthermore, he claims that education should not be confined within the limits of formal curricula or classrooms. Instead, education should prepare learners for everyday life, not for an unknown future. He suggests that the approach to aiding adults to learn should focus on situations rather than subject matter, since every individual adult encounters situations related to their personal or professional life on a daily basis. The subject matter should not be the primary focus as it will come into play when adults need to know something in order to cope with real-life situations. Hence, adults will learn better if they are provided with appropriate learning conditions that suit their needs.

2.1.2 Assumptions of the Andragogical Model

Knowles (1980) distinguishes andragogy and pedagogy as "the art and science of helping adults learn" and "the art and science of helping children learn", respectively, on the grounds that adults and children learn differently (p. 43). He, Elwood Holton, and Richard Swanson surmise that adults can learn effectively if certain conditions are met. The conditions according to their model of adult learning include: (1) a learner's need to know; (2) a learner's self-concept; (3) the role of prior experience; (4) readiness to learn; (5) orientation to learning and (6) motivation. These conditions posit the fundamental principles that frame the andragogical model for successful adult education (Knowles et al., 2005). The following are the assumptions on adult learning which dominate this present study.

2.1.2.1 The Learner's Need to Know

The first assumption of the model of andragogy, the need to know, explains that adults need to be notified what, why, and how they should learn something before they will learn it (Knowles, Holton, & Swanson, 1998). Knox (1986) emphasizes that the early stages of a class are important as learning can be interrupted if the learner believes that the content is unconnected to their life. Adult learners should be convinced that what they need to learn is relevant or else they will ignore it. It is recommended that instructors work with learners in settling an agreement on learning objectives based on the learners' needs so that the learners know what, how, and why they should learn something (Knox, 1986). When adults are made aware of the advantages of learning and/or the disadvantages of not learning something, they are likely to become committed and invest more energy into learning. In the light of this assumption, the what (content), the how (method of instruction), and the why (reason) adult learners should learn something need to be appraised and clarified prior to instruction or learning.

2.1.2.2 The Learner's Self-Concept

The second assumption involves the learner's self-concept that illustrates that adults are responsible for navigating and making decisions for their own learning. This means that adults are viewed as self-directed learners while children are viewed as dependent learners. Knowles, Holton and Swanson (2011) assert that "Once they (adults) have arrived at the self-concept, they develop a deep psychological need to be seen by others and treated by others as being capable of self-direction. They resent and resist situations in which they feel others are imposing their wills on them…" (p. 63). To put this simply, if adults are treated as dependent learners, it is likely to cause

psychological conflicts such as low motivation and poor achievement that account for high dropout rates in adult education. Therefore, based on this assumption, adult learners should be treated as if they are capable of self-directed learning. For adults who still need a certain degree of dependence, instructors should help them make a smooth transition from being dependent to becoming self-directed learners.

2.1.2.3 Role of Prior Experience

The role of the learner's prior experience is the third assumption. To children, the role of previous experience is of little value because the source of knowledge comes almost entirely from instructors or textbooks. By contrast, the value of adults' experience does not only derive from a wealth of accumulated experiences (Mezirow, 1991; Wilson & Hayes, 2002), but also the quantity and quality of their experiences (Dewey, 1938; Knowles et al., 2011). According to Lindeman (1926), experience, is regarded as "the resource of highest value in adult education" and the learner as "a living textbook" (p. 9). The importance of the role of experience is accentuated as John Dewey (1938) asserts that experience provides a starting point for learning. It should be noted that adults see experiences as who they are, while children view them as a series of events. Devaluing adults' experiences could mean ignoring adults as individuals. Hence, instructors should hold the experiences of adult learners in high regard and ensure their experiences are brought into their learning.

2.1.2.4 Readiness to Learn

The fourth assumption is that adults will be ready to learn when they need to cope with their life situations. According to Knowles et al. (1998), children will be ready to learn what instructors or parents tell them generally because they want to pass a test or get a reward while adults become ready when they need to know something that

connects to their life situations (Knowles et al., 2011; Illeris, 2006; Sutherland, 1998). Generally, readiness can develop naturally, for instance, a woman will be ready to learn how to feed a baby successfully, not when she is in a sex education class, but when she has her own child. However, instructors can accelerate a readiness to learn by convincing adult learners to focus on their needs to develop and improve as, for example, in their work performance. Knox (1986) proposes that helping learners see the connection between content and work performance can increase the chances of application. For this reason, Rager (2003) stresses that instructors should show learners how content can be applied to their lives so that they have the opportunity to use what they learn to deal with work-related situations. Therefore, the instruction should combine learners' needs and life situations in order to expedite the adults' readiness to learn.

2.1.2.5 Orientation to Learning

The fifth assumption of this model, orientation to learning, emphasizes that adults are oriented towards a life-centered approach. Subject-centered instruction, according to this model, is not advisable for adults. Knowles et al. (2011) exemplified the case of adult learning in the United States. They revealed that the attempt to increase literacy for adults through reading and writing courses was unsuccessful for many years as there was a high dropout rate, low motivation, and poor achievement. The researchers then discovered that the standard vocabulary lists in the reading and writing courses were not words used in real-life situations. This discovery resulted in the reconstruction of new curricular and the change from general to specific courses, for example, from "Composition I" to "Writing Better Business Letters". Knowles et al. (2011) propose that when the context of application to real-life situations is presented to adults, they will learn more effectively and acquire new knowledge, understanding, skills, values, and attitudes.

On the grounds that adults mostly apply knowledge immediately, life situations and materials needed in handling real-life situations should be the primary focus when designing instruction (Daloisio & Firestone, 1983; Harris, 2000). The instruction, therefore, should engage adult learners in the context of real-life situations so that they learn new knowledge, skills, and attitudes to effectively cope with their lives.

2.1.2.6 The Motivation to Learn

The final component of the andragogical model involves motivation. Normally, adults are more responsive to internal motivators, such as the desire to increase job satisfaction, while children respond more to external factors such as grades and rewards. External motivators, namely job promotions and pay raises, are influential on adult behavior (Knowles et al, 2011), but internal motivators such as self-esteem, quality of life, and job satisfaction are obviously more powerful (Daloisio & Firestone, 1983; Knox, 1986; Knowles et al, 2011; Lindeman, 1926). According to Tough (1979), it is normal for adults to keep growing and developing, but negative self-concepts, inaccessibility of resources and opportunities, time constraints, and programs that are not appropriate for adult learning bar such motivation. To increase motivation internally, adult learners must understand why they need to know or learn the materials. Instructors can help ease the process by showing how the materials will bring self-fulfillment (i.e., job satisfaction), by clarifying realistic expectations or learning goals, by diagnosing gaps in job performance, and by showing how those gaps contribute to their current problems (Knowles et al, 2011). Hence, the last assumption of the andragogical model suggests that adults be motivated to learn, primarily, by internal pressures and, secondly, by external pressures.

The aforementioned assumptions of the andragogical model reveal distinctions on how adults learn. Table 2.1 depicts the different characteristics presented in the models of both pedagogy and andragogy. The two models are compared alongside the six assumptions proposed by Knowles et al. (2011).

Table 2.1: Comparisons between the Pedagogical Model and the Andragogical Model (Knowles et al., 2011)

Aspect	Pedagogical Model	Andragogical Model
1. Need to know	Learners are told what, how, and when any learning should be conducted in order to advance in school.	Learners need to know why something is important prior to learning it and how learning affects the consequences.
2. Self-concept	Learners have a dependent personality.	Learners are independent, autonomous, self-directed and are responsible for their own learning.
3. Role of Experience	Learners' experience is of little worth. The resource for learning comes from teachers' experience and information attained from textbooks, lectures, or readings.	Learners' experience has great importance and is viewed as a major resource for learning.
4. Readiness to Learn	Learners become ready to learn when teachers require.	Learners become ready to learn what they need to know in order to cope with real-life situations.
5. Orientation to Learning	Learning is subject-centered.	Learning is life-centered, task-centered or problem-centered.
6. Motivation to Learning	Learners are motivated by external forces (i.e., grades).	Learners are motivated primarily by internal forces (i.e., satisfaction).

The adoption of the andragogical model, if the suggestions provided in each assumption are strictly complied with, may not guarantee successful learning activity for all adult learners. However, it is important to thoroughly consider the model in all

aspects of both its strengths and weaknesses, so that instructors know how to effectively adopt or adapt the model for better learning outcomes.

2.1.3 Strengths and Weaknesses of the Andragogical Model

Three major strengths of the andragogical model discussed in this literature review are (1) flexible and broad applicability; (2) cohesiveness with other learning theories; and (3) the ability to take into account the perspectives of the learner.

Firstly, the andragogical model can broadly apply to every field of study. Knowles et al. (2005) clarify this strength by quoting "Adult learning occurs in many settings for many different reasons. Andragogy is a transactional model of adult learning that is designed to transcend specific applications and situations" (p. 141). The assumptions that underpin the model can be exploited by, for instance, child and adolescent psychiatric nurses who are assigned to teach parenting skills to parents whose skills in caring for children with Attention Deficit Hyperactivity Disorder (ADHD) are lacking. In addition, the model is flexible, as each component of the model is interdependent. Therefore, the assumptions can be accommodated according to each learning situation (Swanson & Holton, 2001).

Secondly, the model of andragogy can be used cohesively with other learning theories. The andragogical model can be combined with any theories that correspond to the same or similar goals and purposes (Knowles et al., 2005). For example, the model can coordinate with the constructivist theory. Both constructivism and andragogy place importance on the learners and they both hold that the role of learners' experiences is of paramount importance. Learners, according to the constructivist theory, construct new knowledge based on their prior experiences. Similarly, the model

of andragogy asserts that learners' existing experiences have an influence on their learning (Harasim, 2011; Knowles et al., 2005).

Lastly, the andragogical model takes into account the perspectives of the learner. Influenced by the humanistic perspective, andragogy focuses primarily on the self-actualization of the individual (Darkenward & Merriam, 1982; Knowles, 1989; Merriam & Brockett, 1997) and views learners as capable of making sound decisions regarding the learning process on their own (Knowles et al., 2005). The assumptions in the model of andragogy emphasize the importance of learners in respect of their needs to learn, their self-concepts, prior experience, readiness to learn, orientation to learning, and motivation. Knowles (1989) concludes that the model of andragogy focuses on learners as individuals and their learning transactions.

Despite the stated strengths, three major weaknesses examined in this study are (1) an insufficiency of empirical studies; (2) incompatibility of the concept of self-directed learning; and (3) the incomprehensiveness of the model.

Firstly, the model has been criticized for its lack of empirical research *(*Boulton-Lewis, Wilss, & Mutch, 1996*;* Davenport & Davenport, 1985). However, Knowles (1989) argued that the critics' definition of empirical research is too specific. He defended his work by saying that empirical research should not be limited to only highly controlled environments. In addition, according to Knowles et al. (2005), several qualitative and quantitative studies on andragogy have been conducted subsequently.

Secondly, there has been criticism of the incompatibility of the model and self-directed learning (Sutherland, 1998). Sutherland argued that the learner is not self-directed because a certain degree of dependence still remains as the learner can only control the content while instructors control the process. However, Knowles's

definition of self-directed learning describes the learner as being fully independent in directing their own learning or in being able to solicit some support from instructors or fellow learners (Knowles et al, 1998; Pratt, 1988).

Lastly, the andragogical model is criticized for being incomprehensive (Mezirow, 1991). The model addresses the characteristics of adult learners, but never offers a systematic framework or suggests how to adapt andragogy into individual situations. However, Knowles et al. (2005) reckon a complete explanation of adult learning cannot be done easily. The so-called "one size fits all" model (Davenport & Davenport, 1985) is inapplicable in all adult learning contexts, but the model can be flexibly adopted or adapted as needed.

2.1.4 The Conceptual Framework

The model of adult learning used in this study is the enhanced framework called Andragogy in Practice Model by Knowles et al. (1998). Traditionally, the model of andragogy consists of only the core adult learning principles or six assumptions of the andragogical model (as explained in 2.1.2). But two additional components are added to the Andragogy in Practice Model in this section. The components are (1) goals and purposes for learning; and (2) individual and situational differences (Swanson & Holton, 2001).

2.1.4.1 Goals and Purposes for Learning

Goals and purposes for learning are portrayed as developmental outcomes that shape learning experiences (Swanson & Holton, 2001). These outcomes can be organized into individual growth, institutional growth, and societal growth. First, individual growth refers to a process in which personal progress is developed. Personal development includes responsibility, learning, behavior and attitude. Second,

institutional growth means developments in organizational performances, such as profit, revenue, and productivity. Lastly, societal growth refers to a consciousness-raising process that leads to societal transformation (Freire, 1970 as cited in Swanson & Holton, 2001).

2.1.4.2 Individual and Situational Differences

Individual and situational differences are variables affecting adult learning. These variables can be categorized into (1) individual learner differences; (2) subject-matter differences; and (3) situational differences. First, individual learner differences signify that the learner's individual characteristics, such as cognitive styles, learning styles, personality, and prior knowledge can greatly affect the process of adult learning (Jonassen & Grabowski, 1993). Second, subject-matter differences connote that different subject matter may require different teaching/learning strategies (Swanson & Holton, 2001). This means that learners may solicit extra assistance from instructors when they learn about highly complex topics. Last, situational differences explain that diverse teaching/learning strategies may be needed in different learning situations, for example, learners in rural schools may require more or less support from instructors than those in urban areas.

Figure 2.1 illustrates the Andragogy in Practice Model (Knowles et al., 1998 as cited in Holton et al., 2001).

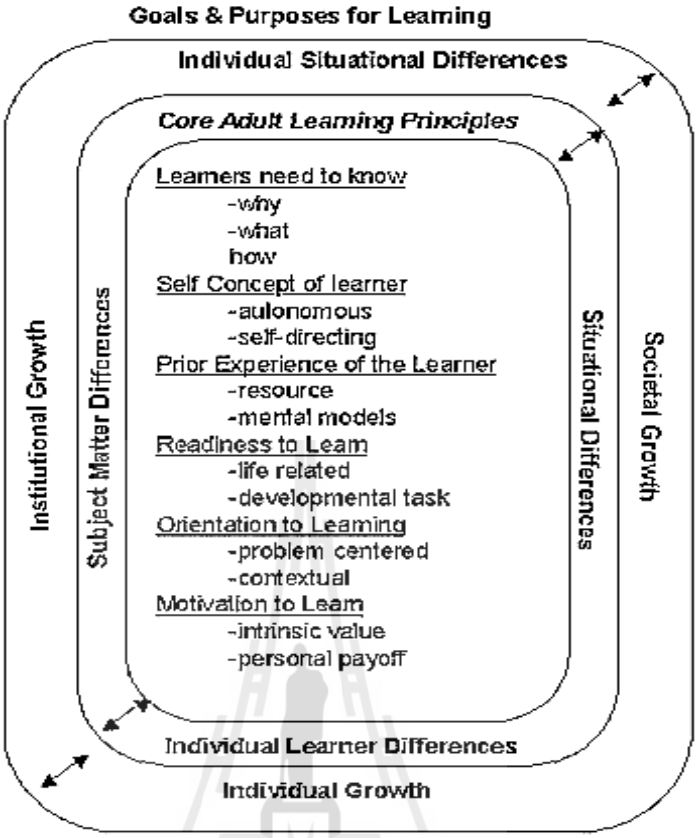


Figure 2.1: The Andragogy in Practice Model (Knowles et al., 1998)

The Andragogy in Practice Model covers formerly criticized key factors, goals and purposes for learning and individual and situational differences, which affect the application of the principles of andragogy. Adopting or adapting the model, whether in whole or in part, depends on the situation, as Knowles (1989) recounts, "it is unrealistic to think that the core principles of andragogy will always fit the same in learning programs offered for different goals and purposes." Therefore, in order for the researcher to integrate Andragogy into the modified ISD model and then to develop a suitable framework, aside from reviewing the assumptions of Andragogy and the Andragogy in Practice Model, other learning theories such as constructivism, Self-

Directed Learning (SDL), Situated-Learning (SL), electronic learning (e-Learning), and Instructional System Design (ISD) will be reviewed in the following sections.

2.2 Theoretical Framework for Integration of Andragogy

2.2.1 Constructivism

Constructivism is a theory that focuses more specifically on learning than teaching (Proulx, 2006). This theory assumes that knowledge is constructed from learners' previous knowledge or experiences (Merriam, Caffarella, & Baumgartner, 2007). The prominent constructivists in the field of cognitive constructivism and social constructivism are: John Dewey, Jean Piaget, Lev Vygotsky, and Jerome Bruner, who all view the core concept rather similarly. Dewey believes that learners individually understand the world and construct knowledge through interactions with their environments. Education should, therefore, be based on real-world experience, so that learners engage in a practical learning activity and demonstrate their knowledge through creativity and collaboration. Piaget also reckons that people actively produce knowledge and make sense of meaning by creating and investigating their own understanding of the world primarily from their experience. Bruner's view on learning is that it is a social process in which learners construct new ideas or concepts based on their current or past knowledge which was influenced by Vygotsky's notion on cognitive development through cultural and social contexts. These constructivists' beliefs on learning lead to the conclusion that both cognitive constructivism and social constructivism presume all learning involves mental construction and learning is individually and societally influenced.

Thus, constructivism and andragogy share similar views on the importance of the learner, the role of experience, and life-centered or task-centered learning (Brookfield, 1998; Knowles et al., 2011). Constructivism underlines a learner-centered approach as learners are active agents in knowledge construction. So, knowledge exists inside the learner and they independently and individually make sense of meaning by accommodating or adapting their previous knowledge to new ideas or experiences (Piaget, 1930). Experience, according to Dewey (1938), provides a starting point for learning. Similarly, the core assumptions of the andragogical model (e.g. the learners' need to know) are of immediate importance to learners. As for the role of experience, andragogy is aligned with Dewey's notion on the central role of experience in learning (Knowles, 1989) and stresses that adult learners bring their accumulated experiences into learning which results in them having a better understanding of who they are. Hence, instructors may encourage adult learners to gain new knowledge based on their previous experience by relating learning activities to their current job descriptions. The job-related tasks will be beneficial in the positive transfer of knowledge because adults are usually motivated to learn when they are cognizant of the usefulness of the new knowledge or skills (Zemke & Zemke, 1996) and when what is learned entails immediacy of application (Brookfield, 1998).

Therefore, engaging adult learners in authentic, life-centered learning is one way to help foster the construction of new knowledge (Merriam et al., 2007) and to materialize personal and professional needs (Knowles et al., 2005). Learning materials should be real, meaningful, and practical because adult learners need to learn what relates to their life or work (Huang, 2002; Knowles et al., 2011; Zemke & Zemke, 1996). Knowles et al. (2011) advance that adult learners prefer to have some control

over what, why, and how materials should be learned. So, instructors may involve adult learners in setting realistic expectations or learning objectives, deciding what topic or material to learn, and agreeing on how to learn and how to assess learning. Besides relating learning tasks to real-life situations, instructors may also provide opportunities for learning to be participatory, proactive, and collaborative, because successful learners tend to actively construct rather than passively receive knowledge (Bruner, 1996). Instructors may provide learners with access to multiple learning resources and events available on many e-Learning platforms today and effectively enhance their participation and collaboration synchronously or asynchronously to engage them in meaningful practices.

Similarly, while learners in constructivism have the ability to construct their own knowledge, those in andragogy are emphasized as being capable of undertaking learning on their own (Knowles et al., 2011). The learner's concept is what Knowles (1989) connotes as self-direction. However, this concept might not be applicable for all, since independent learning is unlikely to occur when adult learners fail to realize or cannot admit that there are gaps in their knowledge or skills. Supposing that learners are aware and able to admit that there are gaps, taking risks in trying a new learning method will inevitably follow. This process is seemingly challenging if learners, especially those who have low self-esteem, have to do it in front of instructors and peers. Learners' self-esteem is on the line usually when they are faced with unfamiliar or new ways of learning (e.g. group work, technology, getting peer feedback or critiques). It should be noted that the low self-esteem of learners tends to result in them making errors and mistakes (*Zemke & Zemke*, 1996) and this impedes them from actively participating in learning. Hence, in order to induce adult learners to actively

and independently undertake learning in a new environment (i.e., e-Learning), their self-esteem needs to be raised or nurtured (Bruner, 1996) and their experiences should be valued (Knowles et al., 2005).

In summary, constructivism assumes that individual learners construct their own knowledge based on existing ideas or previous experiences and learning is influenced by individual (e.g. belief, attitude) and societal (e.g. discussing work with colleagues) factors. Constructivism and andragogy recognize the important role of the learner, their orientation to learning, and their experience as sources of learning. Thus, relating materials or tasks to learners' lives or work will allow knowledge construction to be based on their previous experience. However, adult learners are vulnerable to losing self-esteem when they lack confidence in their knowledge or skills or when they encounter new ways of learning. In order to obtain clearer insights into establishing a suitable framework for adult learners in an online environment, the concepts of Self-Directed Learning (SDL) and Situated Learning (SL) will be discussed in the following sections.

2.2.2 Self-Directed Learning (SDL)

Knowles provides a definition of Self-Directed Learning (SDL) as "a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating goals, identifying human and material resources, choosing and implementing learning strategies and evaluating learning outcomes" (1975, p. 18). Several educators and researchers affirm that adults yearn to be self-directed (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956; Knowles et al, 1998; Sutherland, 1998; Illeris, 2006). Daloisio & Firestone (1983) also emphasize that all adults are capable of self-directed learning. According to Knowles et al. (2011), self-

directed learners can either be labeled as individuals who are completely in charge of learning on their own or those who still need support and assistance from other resources. Learners are immediately engaged in self-directed learning once they voluntarily participate in classes whether traditionally or online. Frequently, undertaking new knowledge may lead learners to seek for additional information or helpers, such as instructors, experts, or peers. This causes their self-directed learning to switch from independent to aided learning.

Knowles et al. (2011) argue that the most important dimension of self-directed learning is the development of personal autonomy. They attest that the degree of autonomy depends on learners' degree of familiarity with the learning materials. The novice often requires more direction and support from instructors while the expert tends to be more autonomous. Instructors can foster self-directed learning and autonomy within the e-Learning environment by providing a variety of learning activities that relate to learners' experiences and offering them the opportunity to select a meaningful task that fits their level of knowledge, personality, and individual needs or preferences (McVeigh, 2009; Swanson & Holton, 2001). E-Learning provides learners with an ample chance to be in charge of independently choosing their own learning path and pace. Learners are free to make decisions on which modules to review, practice, or ignore. Additionally, learners who have difficulty or are unfamiliar with online learning can seek assistance from their instructor and fellow learners or spend as much time as they need on the program. In brief, e-Learning promotes self-direction and autonomy by giving learners opportunities to be in charge of their own learning.

2.2.3 Situated Learning (SL)

Lave and Wenger first pioneered the term Situated Learning (SL) as a model of learning in a community of practice in 1989. The community of practice (CoP) refers to a group of people who work in the same profession or share common interests. However, the group can be organized specifically in order for members to achieve the same expectations or learning goals and develop themselves personally and professionally. Learning, according to Lave & Wenger (1991), is situated in a specific context and knowledge is co-constructed. The situated learning model assumes that (1) learning is grounded in the actions of everyday situations; (2) knowledge is acquired situationally and transfers only to similar situations; (3) learning is the result of a social process encompassing ways of thinking, perceiving, problem solving, and interacting, in addition to declarative and procedural knowledge; and (4) learning is not separated from the world of action but exists in robust, complex, social environments made up of actors, actions, and situations.

Instructors should select tasks or activities that are closely related to learners' personal and professional experiences so that they become more engaged in learning. The selected tasks or activities should not only be relevant to learners' experiences, but should also be authentic because authentic tasks positively contribute to transfer of knowledge (Zemke & Zemke, 1996). Additionally, instructors can assist or provide a scaffold to learners who are unfamiliar with a method of learning (e.g. e-Learning) or content (e.g. new topics). Once learners become familiar with the new way of learning or have enough knowledge about the content, instructors can reduce or withdraw their support.

The similarities between andragogy, constructivism, self-directed learning, and situated learning help establish the theoretical framework that regards adult learners as being capable of independent learning and constructing their own knowledge based on their needs, experiences, readiness, orientation, and motivation. Besides understanding the principles and learning theories that correspond to the learners, in order to promote learning, it is also important to understand the needs of the learners to learn English. The following section explains the current situation with regard to English teaching and learning, the importance of English for Thai nurses, and the needs of English for Specific Purposes (ESP) of the RPNs.

2.3 The Needs to Learn English of Thai Nurses

2.3.1 Current Situation of English Teaching and Learning

In Thailand, English is the only foreign language that has been compulsorily taught in traditional classrooms to all Thais from elementary to tertiary levels (Ministry of Education, 2006). So, Thais who hold a bachelor's degree will have learned English for approximately 12 years, but most of them are still incapable of meaningful communication in English. Several educators and researchers also agree that teaching and learning English in Thailand is mostly ineffective (Chayanuwat, 2013; Darasawang, 2007; Klaichim, Charumanee, & Laohawiriyanon, 2009; Suwanarak & Phothongsunan, 2008). According to Suwanarak and Phothongsunan (2008), a great number of learners are ostensibly unable to communicate because their English skills are deficient and this inability is clearly perceived as a major failure. It is argued that such failure possibly lies in the assumption that many teachers of English spend more time teaching reading and writing rather than speaking and listening skills (Suwanarak

& Phothongsunan, 2008), pay little attention to learners' needs or interests, and disregard learners as a source of knowledge (Gass, 2012). Furthermore, most institutions, such as schools, colleges, and universities offer general English courses to learners, regardless of their language level or what major they are studying. However, it should be noted that for adult learners, general English courses are rather irrelevant and unimportant when compared to specific courses that provide immediate application to their current or future professions.

2.3.2 The Importance of English for Thai Nurses

At present, Thais who wish to work as nurses are generally required to have a degree from a four-year Bachelor of Science in Nursing program (BSN). They can choose to study from colleges of nursing or universities since the curricula for the degree in BNS in these institutions are quite similar. Nursing students learn specific work-based courses (i.e., General Nursing Practice, Psychiatric Mental Health Nursing, and Community and Public Health) in Thai and learn relatively general courses (e.g. English for Communication or Fundamental English) in English. Specific courses in Thai are intensely practical, but general English courses tend to contain overlapping content which students have previously learned in high school which is not really practical for their communication as nurses. Brown, Collins, and Duguid (1989), assert that formal learning is very different from authentic, ordinary practice. This is particularly true because nurses who are studying a basic course of English may learn how to describe their ideal holiday, but not how to report the symptoms and conditions of patients.

Even though almost every Thai nurse uses Thai for daily communication with colleagues and patients, English is still needed in certain situations. According to the

guidelines on Competencies of Registered Nurses on the aspect of communication, all registered nurses (RNs) are required to be able to read and summarize the main ideas from data and technical articles in both Thai and English (Thailand Nursing and Midwifery Council, 2013). These competencies also apply to registered psychiatric nurses (RPNs) who work at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital. They have to develop and improve their English ability in order to read and summarize data from, for example, patient charts and nurse reports. However, specific courses that directly help RPNs summarize data, describe charts, or provide reports in English are rarely available in nursing colleges, universities, or even from commercial courses.

Although the hospital annually offers face-to-face English courses for its nursing staff, they are not specifically designed to allow nurses to put what they have learned into application at the workplace. The needs to learn English for the RPNs for professional development involves specific English rather than general English. The following section describes the definitions and reasons why the RPNs need to learn English for Specific Purposes (ESP).

2.3.3 English for Specific Purposes (ESP)

According to Hutchinson and Waters (1987), "ESP is an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning" (p.19). Carver (1983) proposes that there are three types of ESP: English as a restricted language, English for academic and occupational purposes, and English for specific topics. From Caver's types of ESP, English used by registered psychiatric nurses in giving nursing shift reports can be considered as English for occupational purposes (EOP) and/or English for a specific topic. A specific course is in demand because in professional situations, skills and language in terms of its genre,

discourse, register, grammar, or vocabulary are different. Listening and speaking skills are needed if nurses have to interview foreign patients or discuss interventions with foreign colleagues and reading and writing skills are required when they have to deal with nursing documentation. Practically, nurses may use English for basic workplace communication, such as greetings, or for general purposes, but they may have to know specific words or phrases in order to write nurses notes, reports, and care plans in comprehensible English.

There are considerable resources for general and specific English available both in print and online, but courses particularly designed to fit specific types of nurses within specific contexts (e.g. inpatient RPNs who are required to give reports in English) are scarce. Thus, courses specifically developed to serve the needs of the RPNs for professional development are needed. Aside from tailoring courses to suit their needs, it should be noted that restrictions, such as work demands, working conditions, lack of time for learning, little need for professional development, insufficient computer skills, and individual differences regarding cognitive knowledge and characteristics exist (Attack & Rankin, 2002; Gerkin et al., 2009). However, a large number of studies reveal the positive benefits of e-Learning as it can help reduce such barriers (Belcher & Vonderhaar, 2005; Gerkin et al., 2009; Phillips, 2006; Stephenson et al., 2008; Saekow & Samson, 2011).

In order to provide a suitable e-Learning program to enhance the presentation skills of RPNs in giving shift reports in English, it is important that instructors define the definition, types, and dimensions of e-Learning that best fit the nature of the teaching topics, learners' needs and levels of computer/IT skills. The next section

includes descriptions of e-Learning, the strengths, the weaknesses, and the adoption of e-Learning in the nursing field.

2.4 Electronic Learning (E-Learning)

Advances in information and technology have provided new and flexible ways of learning for learners of all ages. Nowadays, learning is not only limited to traditional classroom-based environments because learners are able to acquire available information and resources anywhere and anytime as long as they have access to the Internet. Online learning, web-based learning, or electronic learning (e-Learning) has grown in popularity in various fields of education; foreign language learning, information and technology, and medical and nursing. Furthermore, e-Learning has found its place not only within formal education, but also in informal education. Institutions and organizations, such as international companies, hotels, and hospitals have introduced e-Learning as a new teaching and learning method for better and more effective in-house training programs as their staff can gain more knowledge or improve their skills according to their individual schedules, locations, and pace of study. The following sections describe the definitions, types, dimensions, and strengths and weaknesses of e-Learning, as well as the adoption of e-Learning within nursing education.

2.4.1 Definitions of e-Learning

"E-Learning" is broadly recognized as learning mediated by computers and the Internet. In a more elaborated definition, e-Learning can be described as the delivery of electronic media, such as text, image, audio, video or animation through the Internet,

Intranet, satellite TV, and CD-ROM to transfer knowledge and skills anywhere and at any time.

Initially, the term "online learning" had been in use years before Jay Cross coined the new term "eLearning" in 1998. Elliott Masie (1997) describes online learning as the use of network technology to design, deliver, select, administer, and extend learning. Cross (2004) simply adds that eLearning is the convergence of learning and the network. The growing popularity of the Internet or the World Wide Web was eminent in the late 1990s. From then on, several e-Learning definitions were formulated for the use of Internet technologies as a means of accessing knowledge. The following examples include definitions provided by Marc Rosenberg (2001), Clark Adrich (2004), and Alex Koohang and Keith Harman (2005)

Rosenberg (2001) describes e-Learning as "the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance". This definition is similar to that of Adrich (2004) who defines e-Learning as a combination of processes, content, and infrastructure to use computers and networks in management and delivery to scale and/or improve one or more significant parts of learning. Koohang and Harman (2005) also emphasize the role of e-Learning as the delivery of education through the use of Internet technologies as a means of transferring knowledge through learning and training.

Aside from stressing the transfer of knowledge through the use of electronic-based technologies alone, several other definitions consider e-Learning as a communication, interaction, and as collaboration tools. The Ministry of Communication and Technology of New Zealand (2008) describes e-Learning as learning facilitated by the use of digital tools and content that involves some form of

interactivity, which may include online interaction between the learner and their instructor or peers. Similarly, Alonso, López, Manrique, & Viñes (2005) refer to e-Learning as the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services, as well as remote exchange and collaboration.

There are two perceived inconsistencies with the term "e-Learning" regarding its spelling and meaning. First, the inconsistency in spelling can be seen from variations, such as E-Learning, eLearning, e-Learning, and e-learning. So far, there has been no established agreement on a particular form of spelling because the meaning is not altered. The spelling may have been adopted based on popularity of use, presumably, within a country or discipline (Moore, Dickson-Deane, & Galyen, 2011). Second, the inconsistency in definition could impact on researchers or course designers / developers, especially when the specific context of learning environment is overlooked (Wilkinson, Forbes, Bloomfield, & Gee, 2004). Moore et al. (2011) conducted a study to investigate whether the definitions of e-Learning, online learning, and distance learning are different or the same. Even though the findings reveal that distance learning and online learning can be used interchangeably with e-Learning, the agreement on what e-Learning is has not been definitively defined. It should be noted that most educators and researchers alternatively use web-based learning, web-based training, computer-based learning interchangeably with e-Learning, distance learning, and online learning.

In an attempt to concisely define working definitions of e-Learning, Alexander Romiszowski (2004) gathered over 20 diverse definitions of e-Learning in 50 articles. He managed to categorize the definitions into two dimensions: online or offline study

and individual self-study or collaborative group work. Four concise e-Learning definitions are presented in Romiszowski's framework of "structured definition of e-Learning".

The framework is shown in Table 2.2.

Table 2.2: Structured definition of e-Learning (Romiszowski, 2004)

	✓ **(A) INDIVIDUAL SELF STUDY** Computer-Based Instruction / Learning / Teaching (CBI/L/T)	**(B) GROUP COLLABORATIVE** Computer-Mediated Communication (CMC)
(1) ONLINE STUDY Synchronous Communication ("REAL-TIME")	Surfing the Internet, accessing websites to obtain information or to learn (knowledge or skill)	Chat rooms with(out) video Audio/Video conferencing
(2) OFFLINE STUDY Asynchronous Communication ("FLEXI-TIME")	Using stand-alone courseware / Downloading material from the Internet for later local study	Asynchronous communication by email, discussion lists or a Learning Management System

Romiszowski (2004) emphasizes that e-Learning activities may be done either solitarily or collaboratively while both synchronous and asynchronous communication can take place or a combination of all those is also possible. Based on the structured definition of e-Learning, a broad working definition of e-Learning will be adopted in this study, which is asynchronous communication by email, discussion lists or a Learning Management System (LMS).

2.4.2 Types of e-Learning

The Flexible Learning Advisory Group (FLAG) is a national strategy recognized for its goals of providing e-Learning skills, professional development

opportunities, and resources and support networks for students and communities in the vocational education and training (VET) sector. FLAG files six types of e-Learning with detailed information in eight categories. The types include e-training, blended learning, the virtual classroom, the digital campus, distance education, and web in class. Each type is described in eight aspects: description, learning mode, content, delivery, collaboration, sector, drivers, and main learning model. However, virtual classroom and digital campus were excluded from Table 2.3 shown in this literature review owing to irrelevancies in description and delivery (i.e., live distance delivery, web conferences).

Table 2.3 outlines the Types of e-Learning developed by FLAG.

Table 2.3: Types of e-Learning adapted from FLAG (2008)

Type	Blended Learning	Web in Class	e-Training	Distance Education
Description	flexible delivery to enrolled or workplace clients	enhanced face-to-face for enrolled students	Intranet (in-house) for workforce development	asynchronous, remote delivery to enrolled learners
Learning mode	highly facilitated group learning	teacher-led	self-paced, individual and self-assessed	Self-paced, supported individual study
Content	range of content, customized free HTML	user-generated and found material	off-shelf, customized	purpose-designed materials, team development
Delivery	LMS, ICT, workplace, some face-to-face	mostly face-to -face	LMS	LMS, some face-to-face
Collaboration	extensive ICT tools, online community	wide range ICT tools	no collaboration tools	some collaboration tools (i.e. forums)
Sector	vocational education and training (VET)	schools and VET	corporate, vocational education and training (VET)	higher education
Drivers	cost reduction, retention, reach, outcomes, learner ICT/ e-Learning skills	variety, motivation, engagement, learner ICT and communication skills	cost reduction, user flexibility, compliance and ease of administration	reach, quality, ease of administration, content and management/IP
Main learning model	outcomes-based job readiness	socially constructed learning	information recall	reflective, knowledge-based learning

With reference to the aspects of description and learning mode, web in class and blended learning have to be excluded considering the elements of traditional face-to-face, teacher-led instruction, and the strong orientation to group collaboration. It is for these reasons that the main subjects of this study are adult registered psychiatric nurses (RPNs) who have limited dedicated time for learning due to life and work

responsibilities. Generally, most RPNs work different shifts each week depending on a schedule arranged either by the head nurses or nurse administrators. Hence, a more flexible course is needed because it is difficult for the RPNs to regularly and constantly engage in learning on the course.

The use of Intranet and the lack of collaboration tools are particular downsides of e-training. Therefore, based on the FLAG framework, the type of e-Learning most appropriate for this study is distance education. Apparently, distance education details match the selected definition of e-Learning which focuses on asynchronous study and group collaboration. The FLAG framework is not the only framework that describes the types of e-Learning. Additionally, the descriptions given in the framework can be adjusted as needed. Further information regarding, characteristics of the RPNs, course contents, procedures, and assessments will be discussed in Chapter 3.

2.4.3 Dimensions of e-Learning

Aside from identifying the applicable working definition of e-Learning and its type that fit this study, the dimensions or the variations in the arrangement of e-Learning delivery are also worth taking into consideration so that both design and development can be effective. Wagner, Hassanein, and Head, (2008) propose several attributes affecting the configuration of e-Learning delivery. Thus, selecting the attributes that suit learners and a learning situation is suggested. Eight attributes are categorized in four dimensions: synchronicity, location, independence, and mode.

Table 2.4 illustrates the dimensions and attributes of e-Learning categorized as synchronicity, location, independence, and mode.

Table 2.4: The Dimensions of e-Learning (Wagner et al., 2008)

Dimension	Attribute	Meaning
Synchronicity	Asynchronous	content delivery occurs at a different time than receipt by the learner
	Synchronous	content delivery occurs at the same time as receipt by the learner
Location	Same place	learners use an application at the same physical location as other learners and/or instructors
	Distributed	learners use an application at various physical locations, separate from other learners and instructors
Independence	Individual	learners work independently from one another to complete learning tasks
	Collaborative	learners work collaboratively with one another to complete learning tasks
Mode	Electronically only	all content is delivered through technology, there is no face-to-face component
	Blended	e-Learning is used to supplement traditional classroom learning

In summary, it is quite likely that the RPNs would find it difficult to physically and synchronously learn through the EPN program due to restrictions on working time and conditions, such as having to work two consecutive shifts. For such reasons, the e-Learning program should allow the RPNs to learn independently and asynchronously, either individually or collaboratively, in an electronic mode, so that they can take entire control of learning for themselves.

The broad definitions, types, and dimensions of e-Learning previously described will be used to identify the specific definition, dimension, and type of e-Learning that suit this study. However, it is important to understand both the positive and negative aspects of e-Learning for it to used effectively as a method of delivery.

The two following sections discuss the advantages and disadvantages of e-Learning and the use of e-Learning in the context of nursing.

2.4.4 Advantages and Disadvantages of e-Learning

There are numerous benefits of e-Learning when compared to traditional learning. Three major advantages discussed in the following section include flexibility in time and place, pace of learning and self-direction, and consistency of content for nurses as adult learners.

First, e-Learning is well-recognized for great flexibility in time, place, and pace of learning (Blake, 2010; Gerkin et al., 2009; Huang, 2002; Karaman, 2011). Time and place have often been seen as barriers to learning, but e-Learning can help overcome these two obstacles by allowing learning materials to be accessible by personal or portable computers, so learning is delivered when and where it is convenient for learners. For the reason that the RPNs no longer conform to a formal learning situation and they cannot be tied to normal school hours, those who work night shifts are able to access learning during the day while morning-shift nurses can undertake a lesson after they leave the shift in the evening. Additionally, since learning is not necessarily confined within fixed locations, nurses are free to learn anywhere, such as at home or at work. E-Learning is advisable for those who have difficulties attending traditional face-to-face classroom due to time constraints or lack of resources to travel or those who have multiple personal and professional commitments (Cottrell & Donaldson, 2013; McVeigh, 2009; Yu et al., 2007).

The pace of learning is another important element in the flexibility of e-Learning. Learners, according to adult learning theory, learn more effectively providing that they have a high degree of control in learning situations. E-Learning allows such

control because learners are independently in charge of choosing the amount of time to spend on tasks, reviews, and practice (Harp, Taylor, & Satzinger, 1998). Furthermore, learners become more self-directed as they are free to select learning materials that meet their level of knowledge, personality, and individual needs or interests (McVeigh, 2009; Swanson & Holton, 2001). Taking into consideration the individual differences in terms of cognitive knowledge, nurses can spend less time on the materials they have already mastered and concentrate more on new information or skills. With respect to personality and low motivation, nurses who have low confidence in learning new knowledge can path their own learning by spending as much time as they want on the materials or repeating the exercises as often as they need. Hence, these benefits can help reduce undesired anxiety and stress and increase satisfaction and provide a positive learning experience, especially for adult learners.

Last, e-Learning can assure learners that the contents or materials they are learning are consistent at all times and locations. The consistency of content is important to nurses, chiefly because it reduces the chances of developing conceptual confusion and conflict with new knowledge which may lead to a negative learning experience. In most traditional learning settings for nurses, there may be more than one instructor involved in one course. The instruction and explanation on the same concept or procedure may be varied and eventually lead to the learners' confusion. However, in an e-Learning environment, the same quality of instruction is obtained because there is no dependence on a specific instructor (FAO, 2011).

Two evident disadvantages of e-Learning include costs and technological issues. Developing e-Learning tends to cost more than developing simple classroom materials,f if experts and complex multimedia or interactive software are required.

However, the costs of facilities, training, travel, materials, and job time lost to visit classrooms may result in the individual having to bear higher costs. Another drawback concerns technological issues. Some e-Learning platforms require special systems, licenses and specifications. Learners may have to download additional installations of special plug-ins or add-ons which can lead to frustration. Therefore, the e-Learning platform should be user-friendly and be of low technical complexity to learners. Cheng (2013) affirms that a user-friendly platform increases nurses' e-Learning acceptance. It is suggested that the e-Learning platform be compatible with nurses' technological skills to prevent chances of negative attitudes toward learning online and, consequently, students dropping out of the program.

2.4.5 E-Learning in the Nursing Field

A significant number of researchers assert that e-Learning has become an eminent means of learning in nursing education (Abdelaziz et al., 2011; Attack, 2003; Belcher & Vonderhaar, 2005; Cobb, 2004). E-Learning is favored possibly because it allows nurses who have busy work schedules and heavy responsibilities to learn conveniently anytime and anywhere at their own pace (Chang et al., 2008; Gerkin et al., 2009). Furthermore, there is evidence that nurses can benefit from e-Learning as it reportedly helps improve knowledge and skills (Abdelaziz et al., 2011; *Layton, 2007;* Wilkinson et al., 2004; Yu & Yang, 2006), increase enjoyment in learning (Liu et al., 2014), develop self-directed learning (Blake, 2010; Denny & Higgins, 2003; McVeigh, 2009), accommodate different learning styles (Cottrell & Donaldson, 2013), and promote positive attitudes, (Karaman, 2011; Yu et al., 2007).

Despite the stated positive outcomes, Ruiz, Mintzer, and Leipzig (2006) contend that e-Learning should not be used as an absolute method of learning. Many studies

also suggest that e-Learning be used as a supplement (Abdelaziz et al., 2011; Chang et al., 2008; Cottrell & Donaldson, 2013). The use of e-Learning is promoted provided that learners' needs, their computer and technology skills, the nature of topics, and the outcomes for each learning situation are carefully considered (Knowles et al., 2011; Wilkinson et al., 2004). However, according to a systematic review and meta-analysis by Lahti, Hätönen, and Välimäki (2014), there is no significant difference regarding nurses' knowledge, skills, and satisfaction between face-to-face learning and online learning. Hence, e-Learning can be a great means of learning for nurses if certain restrictions such as nurses 'insufficient computer skills' are removed.

So far, reviewing andragogy, constructivism, self-directed learning, situated learning, and e-Learning can all help clarify adult learners' characteristics, learning needs, factors affecting their will to learn, and useful guidelines on how to effectively design a learning activity using e-Learning. Next, three models of instructional systems designs (ISD) and the selected learning platform will be discussed.

2.5 Instructional Systems Design (ISD)

Apart from making a sound decision on what principles and teaching strategies should be used as a basis for teaching online, instructors should determine systematic steps in creating a learning program that will yield better learning outcomes for learners. However, the Instructional Systems Design (ISD) can, to some extent, ensure the success of providing effective instructions if instructors follow the adopted model step by step in creating the learning program. In the following sections, definitions of the Instructional Systems Design and three models: the ADDIE Model, the Dick and Carey Model, and Suppasetseree's Remedial English Online (SREO) Plan are reviewed.

2.5.1 Definitions of Instructional Systems Design (ISD)

Broderick's (2001) comprehensive definition of Instructional Design or Instructional Systems Design is as follows:

> Instructional Design is the art and science of creating an instructional environment and materials that will bring the learner from the state of not being able to accomplish certain tasks to the state of being able to accomplish those tasks. Instructional Design is based on theoretical and practical research in the areas of cognition, educational psychology, and problem solving. (p. 1)

Hence, instructional systems design (ISD) is a systematic process of designing and developing instructional courses or materials. It is a theory-tested method for analyzing learning needs and developing instruction that will facilitate the transfer of knowledge and skills, improve desired learning outcomes, and promote positive attitudes of learners. The researcher reviewed three existing ISD models in order to find the model that would best suit the context of this study. The three models include the ADDIE Model, the Dick and Carey Model, and Suppasetseree's Remedial English Online (SREO).

2.5.2 The ADDIE Model

A number of instructional systems design models can be seen as variations of the ADDIE model (Dick, Carey, & Carey, 2005). ADDIE consists of five interrelated phases: Analysis, Design, Development, Implementation, and Evaluation. The model provides a flexible guideline for developing effective and efficient instruction. Since these phases are overlapping, any changes could impact on the entire system and the outcome of instruction (Suppasetseree, 2005).

Figure 2.2 presents ADDIE, the most frequently used ISD model.

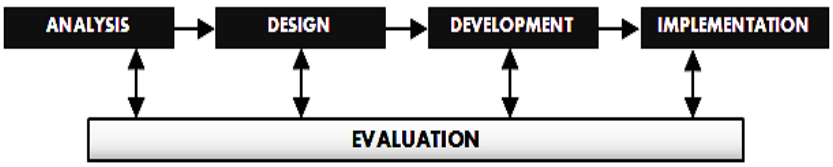


Figure 2.2: ADDIE model

Instructors/designers define what is to be learned in the analysis phases and how learning will occur in the design phase. Then, the learning materials, practices and tests covered in the EPN program are created in the development phase to be implemented in the implementation phase. The last phase, the evaluation, involves assessing and evaluating whether learning is successful or not. ADDIE is the most frequently used model and is known for its flexibility. The Dick and Carey model is also very popular among instructional systems design designers and its stages in each phase are more elaborate.

2.5.3 The Dick and Carey Model

Walter Dick and Lou Carey published a model called "The Dick and Carey Systems Approach Model" in 1978. According to Dick and Carey (2005), the instruction is perceived as a whole system where context, content, learning, and instruction are interrelated. Consequently, the success of learning depends on instructors, learners, learning materials, learning environment, learning tasks or activities, learners, as well as a delivery system or a learning platform. The Dick and Carey model follows every phase identified within the ADDIE model, but the design and the use of formative and summative evaluation are included in the evaluation phase.

Even though the model has been criticized for its rigid stages, it is well-elaborated and easy to follow, especially for novice instructors/designers.

Figure 2.3 illustrates the Dick and Carey Systems Approach Model.

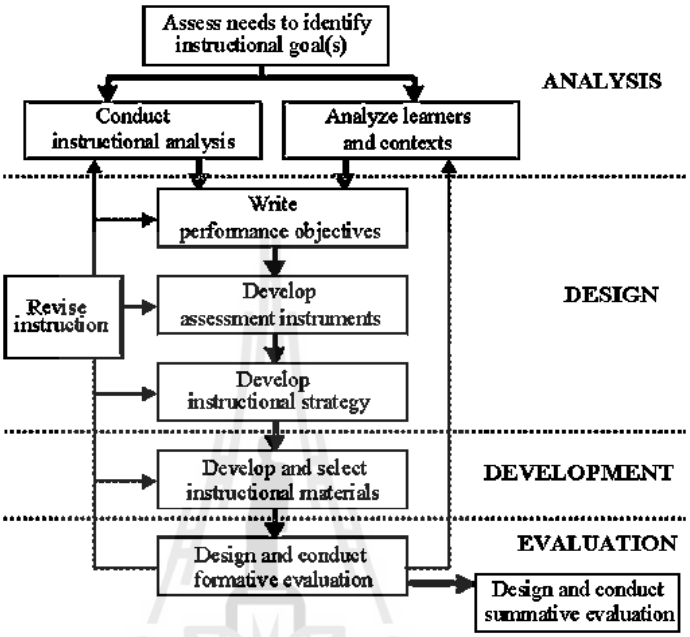


Figure 2.3: The Dick and Carey Systems Approach Model

In the analysis phase, instructors/designers identify the overall instructional goals by describing desired knowledge, skills, or attitudes that both instructors and learners are expected to acquire. Next, instructors/designers conduct an instructional analysis by determining what learners should be able to do in order to perform particular tasks or activities. Then, the analyses of learners and contexts are performed in order to obtain the general characteristics of the learners, such as their prior knowledge, skills, experiences, as well as their demographic information, so that instructors/designers can relate the data to the knowledge and skills that the learners should learn.

In the design phase, instructors/designers manipulate the information gathered previously from analyses of instructional materials, learners, and context in order to

write the performance objectives or the descriptions of learners' desired behaviors, and the criteria that will be used to evaluate learners' performances. After writing the performance objectives, instructors develop assessment instruments, such as pre-tests, post-tests, and exercises. Then, instructors/designers design instructional strategies on how activities, content, and assessments should be developed. Instructors/designers develop and select the instructional materials in the development phase. Lastly, in the evaluation phase, revisions will be made to any materials that need improvement in the formative and summative evaluations.

2.5.4 Suppasetseree's Remedial English Online (SREO) Plan

Suppasetseree (2005) developed a model of the Internet-based instructional system called Suppasetseree's Remedial English Online (SREO) Plan for first-year students at Suranaree University of Technology.

Suppasetseree's Remedial English Online (SREO) Plan is shown in Figure 2.4.

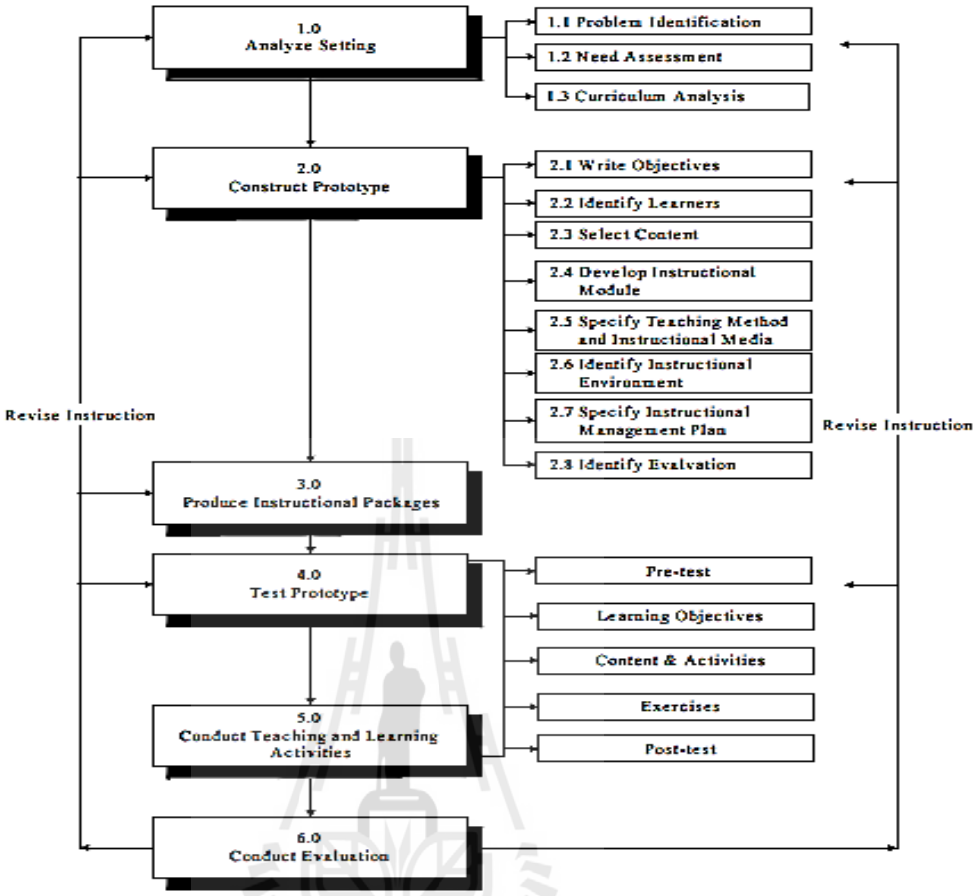


Figure 2.4: Suppasetseree's Remedial English Online (SREO) Plan

The SREO Plan comprises of six steps: Analyze Setting, Construct Prototype, Produce Instructional Packages, Test Prototype, Conduct Teaching and Learning Activities, and Conduct Evaluation. There are sub-steps in certain major steps, i.e., Analyze Setting, Construct Prototype, and Test Prototype. The sub-steps in the Analyze Setting include (1) Problem Identification, (2) Needs Assessment, and (3) Curriculum Analysis. In the step for Construct Prototype, there are 8 sub-steps. They are (1) Write Objectives, (2) Identify Learners, (3) Select Content, (4) Develop Instructional Program, (5) Specify Teaching Method and Instructional Media, (6) Identify Instructional Environment, (7) Specify Instructional Management Plan, and (8) Evaluation. The Test

Prototype step adds five more components. They are (1) Pre-test, (2) Learning Objectives, (3) Content and Activities, (4) Exercises, and (5) Post-test.

After reviewing the ISD models of the ADDIE, Dick and Carey, and SREO, the researcher decided to modify the reviewed models based on the SREO Plan as an exemplary model because the SREO Plan is created and developed to best fit online learning, while the ADDIE model and Dick and Carey model can be broadly adopted in any learning environment either for tradition teaching or for use online. However, in order to integrate the principles of Andragogy, Constructivism, Self-Directed Learning, and Situated Learning into the modified model for designing and constructing the English for Psychiatric Nurses (EPN) program that focuses on the needs of learners to achieve desirable outcomes, certain steps in the original SREO Plan were modified to better suit the learning conditions of this study.

The researcher retained most the major phases and steps in the SREO Plan even though some were reordered. Since this study places particular emphasis on the principles of Andragogy, Constructivism, Self-Directed Learning, and Situated Learning, the focus falls on learners' needs, their ability to construct knowledge from their experiences, and their ability to take charge of their own learning. So, it is important to understand the problems and the needs of the learners in order to design and develop a suitable e-Learning program for them. Thus, two steps in the phase of Analyze Setting; Problem Identification and Needs Assessment were placed as Phase 1 in the modified ISD model. The reasons for setting Problem Identification and Needs Assessment as a major phase are because the researcher believes that adults are more likely to actively engage in learning if their learning problems are resolved and their needs satisfied. Therefore, this phase needs especial attention. The Curriculum Analysis

was discarded given that this study is conducted with registered psychiatric nurses (RPNs) who are no longer in formal education. Therefore, there is no curriculum involved in creating the online program. Additionally, all sub-steps of the Construct Prototype in the SEOR Plan were grouped under a new title "Development of E-Learning Materials and Learning Activities Phase". Detailed descriptions of the development of the modified ISD model are further discussed in Chapter 3: Methodology.

The next section explains the definition of Learning Management System (LMS), the features of the selected LMS platform called "CourseSites by Blackboard™" and the benefits this platform offers.

2.6 Learning Management System (LMS)

A Learning Management System (LMS) is a software application that allows course developers or instructors to administer, deliver, manage, monitor, and track learning activities as well as to report learning outcomes on the Internet. LMS also enhances online collaboration through interactive features, such as discussion boards and forum or video conferencing. Examples of open source LMSs are Claroline, eFront, Dokeos, OLAT, Sakai, and Moodle. Among proprietary LMSs, the Blackboard Learning System is one of the most well-known platforms (Berking & Gallagher, 2010). Other popular proprietary LMSs available are eCollege, JoomlaLMS, High Learn, and WebCT. However, the selected LMS platform "CourseSites" is a cloud-based learning platform which is flexible and allows open education for unlimited learners around the world and it can also be described as a massive open online course (MOOC).

CourseSites by Blackboard™

CourseSites by Blackboard™ was carefully deliberately chosen as the learning management system platform for this study for four reasons.

First, it is a free learning platform equipped with the most recent technology powered by the Blackboard Learning System. The technology includes Blackboard Learn™, Blackboard Collaborate™, Blackboard Mobile™, Blackboard Connect™, and Blackboard Release 9.1. These systems allow instructors and learners to personally, collaboratively, and flexibly work online anytime and anywhere through personal computers, laptops, handheld devices, and mobile phones. Also, instructors can easily develop contents, post announcements, create tests and quizzes, as well as share the course with the online community or Open Education Resources (OER).

Second, instructors are provided with supports and toolkits so the development of the e-Learning course can be implemented more easily. CourseSites by Blackboard™ allows instructors to create interactive, multimedia contents and quizzes by, for example, uploading or posting videos from YouTube, documents from SlideShare, and images from Flickr as well as to foster social learning through live chat, instant messaging, wiki, or a forum board. In addition, CourseSites by Blackboard™ allows a maximum storage of 500 MB of all file types that both instructors and learners can upload.

Third, CourseSites by Blackboard™ provides practical management tools for instructors to develop contents: invite and enroll learners; monitor and track learning progress; download or print assignments; and record or report grades either online or offline. For content development, instructors can add static texts, graphics, presentations, audio, and video using preinstalled tools or they can import files from

third-party websites such as YouTube. Instructors can invite learners directly through group e-mails or they can create users either individually or in batches. Conveniently, Grade Center Function allows instructors to monitor every learner's course visits and their progress and learners can check their own learning progress, their scores, or missing exercises and tests through My Grade and Notification Board.

Lastly, instructors can enroll unlimited learners by inviting them to use the Course Invitations tool and by asking them to register the course using their own Facebook, Twitter, Hotmail, Gmail or Yahoo account or instructors can randomly assign usernames and passwords to all learners. Instructors and learners can be assured that CourseSites by Blackboard™ is password protected and, if learners register the course through e-mail or social networking account, they will not be bothered by losing their usernames or passwords.

Considering these four major benefits, CourseSites by Blackboard™ Learning System is a suitable learning management system platform that facilities learners to individually and collaboratively learn through an interactive, multimedia course and allows instructors to effectively manage teaching for positive learning achievements for learners of all ages.

2.7 Related Studies on E-Learning in the Nursing Field

Previous studies specifically on enhancing oral presentation skills in English for registered psychiatric nurses (RPNs) are particularly scarce. However, a large number of studies on the integration of online learning technology in the nursing field are available. The previous studies on online learning in nursing education found in this section revealed positive outcomes in terms of knowledge gain and learning

satisfaction. Even though many studies (Bloomfield, Roberts, & While, 2010; Cega, Norman, & Marks, 2007; Paladino & Peres; 2007) compared traditional and online teaching methods, there are few statistically significant differences regarding knowledge gain and attitudes between these two methods of learning. The researcher reviewed six related studies because there are similarities in terms of the rationale, purposes, and the methodology between these studies and this current research study.

In 2004, Wilkinson, Forbes, Bloomfield, and Gee conducted a study to explore nurses' perceptions toward four different web-based modules. The modules, developed to serve in post-registration nurse education, were about dermatology; diabetes; mentorship; and prescribing. The participants were 39 student nurses who had never learned through web-based modules. The researchers obtained the participants' perceptions toward the modules using questionnaires and group interviews after the completion of four modules. The results showed that 79% of the participants completed the modules and only 66% passed. This unsatisfactory outcome with a 21% dropout rate were, according to the researchers, due to the participants' insufficient IT skills. They concluded that even though learners benefited from web-based learning because of its flexibility and richness in learning resources, instructors should take into account the learners' needs, the nature of the topics, and the learning outcomes.

Chang, Hsiao Sheen, Chang, and Lee (2008) developed an e-Learning education program for N2 and N3 levels for 42 staff nurses in Taiwan. The researchers developed the e-Learning program aiming to offer more opportunities for in-service nurses who had time constraints owing to heavy workloads and shift rotations. They designed the webpages on the basis of user-friendliness, system stability, and accessibility to the e-Learning program. Three locations within Cathy General Hospital in Taipei were

purposively chosen as a learning space due to limited equipment and the nurses could access the webpages only within the hospital using the Intranet, not the Internet. The e-Learning program or ELP integrated the use of audio, video, and Power Point Presentations. Prior to learning through ELP, the nurses received four to six hours training in e-Learning techniques.

The participants were allowed to take the program within a period of three months to complete five courses covering the topics of (1) case study, (2) career development, (3) teaching and learning, (4) nursing and law, and (5) communication. For assessment, the researchers created six sets of ten multiple-choice written test questions which were randomly selected by the computer. A four-point Likert-type scale was adopted for a questionnaire about satisfaction and for a questionnaire about the students' opinions. All the participants in this study were female nurses with a mean age of 30.5 years old who had 7.6 years of nursing experience as the mean length of their experience. Most nurses were reported to spend up to five hours a week on the Internet. The results of the study showed that the mean scores for all five courses were 77.7, 81.4, 87.7, 87, and 76 respectively. The nurses revealed positive satisfaction toward learning through the e-Learning program.

McVeigh (2009) conducted a study on the causative factors that influenced the utilization of e-Learning in post-registration nursing students. She collected the data from 88 nursing students from the School of Nursing and Midwifery who took the post-registration Professional Education in a practice module using a survey questionnaire. The findings of this study revealed that flexibility in time, management, pace of learning, self-direction, and access to information positively influenced the use of e-Learning. However, the constraints were linked to learners' functional capability, level

of computer skills, negative perceptions toward e-Learning, commitments, and lack of organizational support. It was suggested that instructors carefully select an appropriate technology and a method of teaching to best suit learners' needs as well as their level of IT literacy.

Abdelaziz, Kamel, Karam, and Abdelrahman (2011) conducted an evaluation of an e-Learning program versus traditional lecture instruction for second-year nursing students in Ain Shams University in Cairo, Egypt. The control group, who were given traditional lectures, consisted of 189 students, while the study group used e-Learning as a learning method, and included 90 students. The researchers used knowledge assessment sheets, observation checklists, a 7-point semantic differential scale, and a questionnaire as a data collection method. The assessment focused on cardiovascular knowledge in six topic areas : (1) angina pectoris, (2) myocardial infarction, (3) inflammatory heart disease, (4) valvular heart disease, (5) heart failure, and (6) pulmonary edema. It revealed that there was a highly significant difference regarding the posttest scores of knowledge between the two groups in all topics except for the topic of myocardial infarction. According to the researchers, this confirmed that e-Learning is an effective teaching method in nursing education. The students in the study group found e-Learning effective and interesting. However, some students revealed that they had to rely on their friends who had better computer skills for help. From this feedback, the researchers concluded that the lack of computer skills could affect the successful participation of students using online communication methods. Furthermore, they suggested that if the students have limited computer skills and resources, it is better for instructors to use blended learning instead of fully online learning.

Cottrell and Donaldson (2013) explored the attitudes of registered nurses from two District General Hospitals in Scotland on the Learn blood transfusion Module 1: Safe Transfusion Practice e-Learning program regarding personal learning styles and learning needs. Out of a total number of 89 registered nurses, only 7 voluntarily participated in the study. All participants were experienced registered nurses and presumably had some basic IT skills. Six participants had been actively involved in transfusion practice within 3 months prior to the time of the interview. The questions for the interview were divided into 5 themes: learning preferences, interactive learning, course design, patient safety, and future learning needs. The researchers considered whether the e-Learning programme generally met the diverse learning styles and preferences of the learners and supported self-directed and self-paced study. However, only the utilization of technology was not sufficient to achieve a successful learning outcome, as the learners needed more support, so blended learning might be a more appropriate approach.

Liu, Rong, & Liu (2014) developed an evidence-integrated e-learning continuing education program in case management to describe its development and effectiveness. The study was conducted with 200 Taiwanese psychiatric nurses who were randomly recruited into either an experimental or a comparison group. The experimental group used the e-learning program and completed a satisfaction survey. The participants' knowledge scores were assessed before, after, and at a three month follow-up after completing a five-module e-learning program. The results revealed that the participants in the experimental group received significantly higher scores than those in the comparison group and they showed positive learning perceptions based on a five-point scale in a survey of their attitudes. The participants had positive perceptions

toward the flexibility of the e-learning program and they agreed that it promoted self-reflection and autonomous learning. They reported that they enjoyed learning on the program and that they found it easy to use CDs as it reduced network problems. The researchers summarized that the e-learning program was efficient for continuing nursing education and it helped the participants to improve and retain their knowledge in case management and established positive perceptions toward learning. They also added that e-learning was suitable for nurses who could not attend face-to-face courses due to conflicts in their work schedules.

There are similarities among all the six reviewed studies in terms of positive outcomes in adopting e-Learning in the nursing field. Every study confirmed that learners had positive attitudes toward e-Learning for its flexibility in time and place, accessibility to learning resources, and improvement in knowledge and skills. In addition, McVeigh (2009) and Liu et al., (2014) reported that learners claimed that e-Learning promotes self-direction and autonomy in learning. Furthermore, Chang et al. (2008) and Liu et al. (2014) agreed that e-Learning can be implemented as an alternative learning approach for registered nurses who have difficulty attending a traditional classroom due to heavy workloads and irregular work schedules.

Although Liu et al., (2014) confirmed that e-Learning improved learning outcomes and promoted positive attitudes in continuing nursing education for nurses who have heavy workloads and time constraints, the studies by McVeigh (2009) and Cottrell and Donaldson (2013) argued that, regardless of how versatile e-Learning was, not all topics can be taught online and methods of instruction matter. Learners' inadequate computer/IT skills should also be paid attention to, since it appeared to be one of the major barriers that impeded learning and affected positive perceptions toward

e-Learning (Abdelaziz et al., 2011; Cottrell and Donaldson, 2013; McVeigh, 2009; Wilkinson et al., 2004). Therefore, it is suggested that learners' needs, the nature of topics, and levels of computer/IT skills should be taken into careful consideration when adopting e-Learning as a learning approach.

In view of these stated barriers, the researcher conducted a needs assessment survey to gather data specifically regarding the RPNs' computer/IT skills, e-Learning interest, and experience of e-Learning. The results revealed that even though most of the RPNs had computer skills (n = 67), showed interest in e-Learning (n = 63), 55 of them had no experience of e-Learning. Hence, the RPNs' lack of e-Learning experience was a concern when selecting an online learning platform. Considering that adult learners may have resistance to new ways of learning and that they may need continuing support from instructors or colleagues, an easy-to-use and user-friendly platform was chosen.

2.8 Summary

This chapter discusses the principles of learning and the theoretical frameworks used to support learners in learning English as a foreign language through e-Learning. The discussion includes details of the principles of adult learning, Constructivism, Self-Directed Learning, Situated Learning, e-Learning, the Instructional System Design (ISD), and the selected e-Learning platform. The general teaching and learning problems of the English language of Thai nurses, reasons why nurses need to learn English for a specific purpose in a non-traditional learning environment, and related studies are also discussed. The research methodology is presented in detail in the next chapter.

CHAPTER 3

METHODOLOGY

This chapter describes the research methodology employed in the present study. This includes a brief overview of the research methodology and detailed descriptions of the research design, population and sample, dependent and independent variables, research instruments (e.g., the modified ISD model, the EPN program, the scoring rubric, and the questionnaire), the development and efficiency testing of each instrument, the data collection, the data analysis, and the statistical methods used.

3.1 Research Design

The present study is designed as a pre-experimental study that employs both qualitative and quantitative methods to analyze the data. The primary aim is to develop the modified ISD model to use as a framework for designing and constructing the English for Psychiatric Nurses (EPN) program for Thai registered psychiatric nurses (RPNs) to enhance their oral presentation skills in giving verbal shift reports on patients with paranoid schizophrenia. The EPN program includes static texts, vocabulary, phrases, audio files, and grammar found in nursing notes and shift reports on patients with paranoid schizophrenia. The contents help enhance oral presentation skills for the RPNs who wish to improve their ability in giving verbal shift reports in English, but have a low proficiency level in English.

The major reasons for choosing shift reports on patients with paranoid schizophrenia as the main contents are based on the data obtained from a needs assessment survey, the suggestions offered by nurse administrators and nurse educators, and the official hospital's statistics on inpatient admissions that indicate that over 45% of patients with paranoid schizophrenia have been consecutively admitted from the year 2007 – 2013 (See Appendix J). Hence, it can be assumed that the RPNs are likely to give shift reports on patients with paranoid schizophrenia more frequently than for patients with other mental illnesses. In addition, certain vocabulary and phrases used to describe the symptoms or conditions of patients with paranoid schizophrenia regarding perception, thoughts, affect, and behavior tend to overlap with those used to report patients with other mental illnesses, such as mental and behavioral disorders due to the use of alcohol, bipolar affective disorder, acute and transient psychotic disorders, or depressive episodes.

The researcher plans to design the current study as a single group pretest/posttest design where a control group is intentionally excluded because the number of the RPNs is limited and their time constraints lead to the inability to attend either traditional or blended classrooms. Consequently, the RPNs use the EPN program as a learning medium to independently learn at their own pace, space, and time. In this study, the teaching and learning are managed almost entirely online. The course contents are delivered online with the manipulation of static texts, images, and audio files. However, the RPNs, the researcher/instructor, and the raters meet face-to-face for the oral pretest/posttest administered at the hospital.

Prior to learning through the EPN program, the RPNs took an oral pretest by giving verbal shift reports on patients with paranoid schizophrenia in English. During

the pretest, they were asked to make two short presentations about a summary of shiftwork and a case of any patient with special precautions using the shift report forms (See Appendix A). Then, they studied the EPN program and completed every exercise and test in five units (See Appendix B). Last, the RPNs performed the oral posttest. The RPNs' oral performances are measured in three aspects: accuracy of content; use of language; and pronunciation by two raters. The accuracy of content is rated because the RPNs are required to be accurate in their reports on patients' information and conditions. The use of language in terms of grammar and vocabulary is rated to ensure that the RPNs can convey the information correctly. The pronunciation is rated because mispronunciation can lead to different meanings of words.

A single group pretest/posttest design is presented in Figure 3.1.

	EXPERIMENTAL	
01 (Pretest)	X (Treatment)	02 (Posttest)

Figure 3.1: The Single Group Pretest/Posttest Design

The research procedure is illustrated in Figure 3.2.

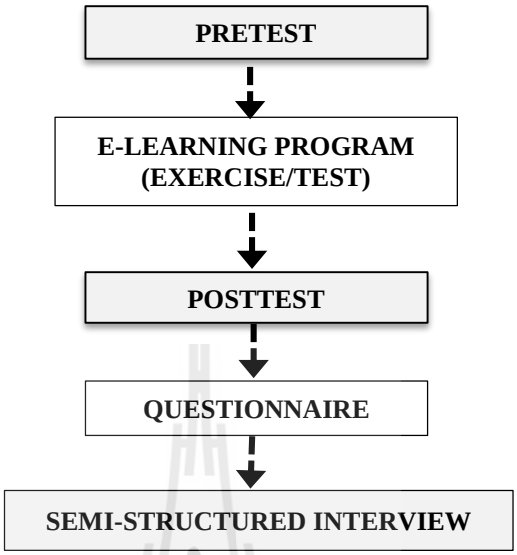


Figure 3.2: The Implementation, Assessment and Evaluation of the Study

3.2 Population and Sample

3.2.1 Population

The population in this study was a group of 70 registered psychiatric nurses (RPNs) who work at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital and had participated in a workshop on "Nursing Process and Documentation for Mental Health Nurses" taught in both English and Thai. Out of 70 RPNs, there were 14 males and 56 females. The ages ranged from 23 to over 50. Most of them held a bachelor's degree in Nursing Science and 15 held a master's degree in specialized areas in psychiatric and mental health nursing. Forty-three RPNs were reported to have over 10 years of experience working at the psychiatric hospital while 11 have worked for 5 to 10 years and the rest for less than five years. These RPNs work in different departments: 14 work

in the outpatient department (OPD), 43 in the inpatient department (IPD), 7 in the child and adolescence psychiatric department and 6 in other departments.

3.2.2 Sample for the Tryout Steps

The sample in the tryout steps consisted of 39 RPNs at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital who participated in the workshop on "Nursing Process for Psychiatric and Mental Health Nurses". The RPNs read and signed a letter of consent to show that they voluntarily agreed to study the EPN program independently, completed all exercises and tests in the five modules, performed the oral pretest/posttest, and provided personal information and feedback for the questionnaire and the interview. The descriptions of the number of participants, the criteria, and the procedures of the three tryout steps are further explained in 3.5 Pilot Study.

3.2.3 Sample for the Experiment

The sample in this study comprised 30 RPNs, five males and twenty-five females. They were purposively selected from 70 RPNs who participated in the workshop on "Nursing Process for Psychiatric and Mental Health Nurses". The selected RPNs were nurses who worked in the inpatient department (IPD) at the time of conducting the research. The inpatient nurses had more involvement in giving shift reports on patients with paranoid schizophrenia when compared to nurses in other departments, such as the child and adolescence psychiatric department or the outpatient department (OPD) where there were no admitted patients, but only clients. Therefore, the selected participants were the RPNs who are working within the following five inpatient wards: Phirunthong, Pakakrong, Krongjit, Bhuddaraksa, and Feungfah. Additionally, the RPNs who participated in the current study had experience in giving shift reports in their IPD wards because the hospital had started a project to encourage the RPNs to give verbal reports in English.

3.3 Variables

The theoretical framework from the research design indicated two main types of variables: independent and dependent variables.

3.3.1 Independent Variable

The independent variable in this research study was the EPN program designed and based on the modified ISD model to allow the RPNs to learn independently online.

3.3.2 Dependent Variables

There were two dependent variables: (1) the RPNs' learning outcomes measured by the exercises and test scores and (2) their attitudes toward learning through the EPN program explored by the questionnaire and the semi-structured interview questions.

3.4 Research Instruments

There are seven instruments in this study. Five instruments: the modified ISD model, the EPN program, the lesson plan, and questionnaire, and the semi-structured interview questions were developed and constructed entirely by the researcher while the scoring rubric for assessing oral presentation skills and the evaluation form were adapted from other sources. The researcher sought advice from experts in the fields of English Language Teaching, Psychiatric and Mental Health Nursing, and Instructional Systems Technology to construct the research instruments. The following were the procedures used for the development and the efficient testing of each instrument.

3.4.1 The Modified ISD Model

The modified ISD model was developed to be used as a framework for designing and constructing the EPN program. The model adopted major phases and

steps from the SREO Plan although some phases and steps were reordered, added, and discarded to better suit the learning context of this study. The modified ISD model comprises six phases and twelve steps as shown in Figure 3.3.

Figure 3.3 illustrates the Modified ISD Model used in this study.

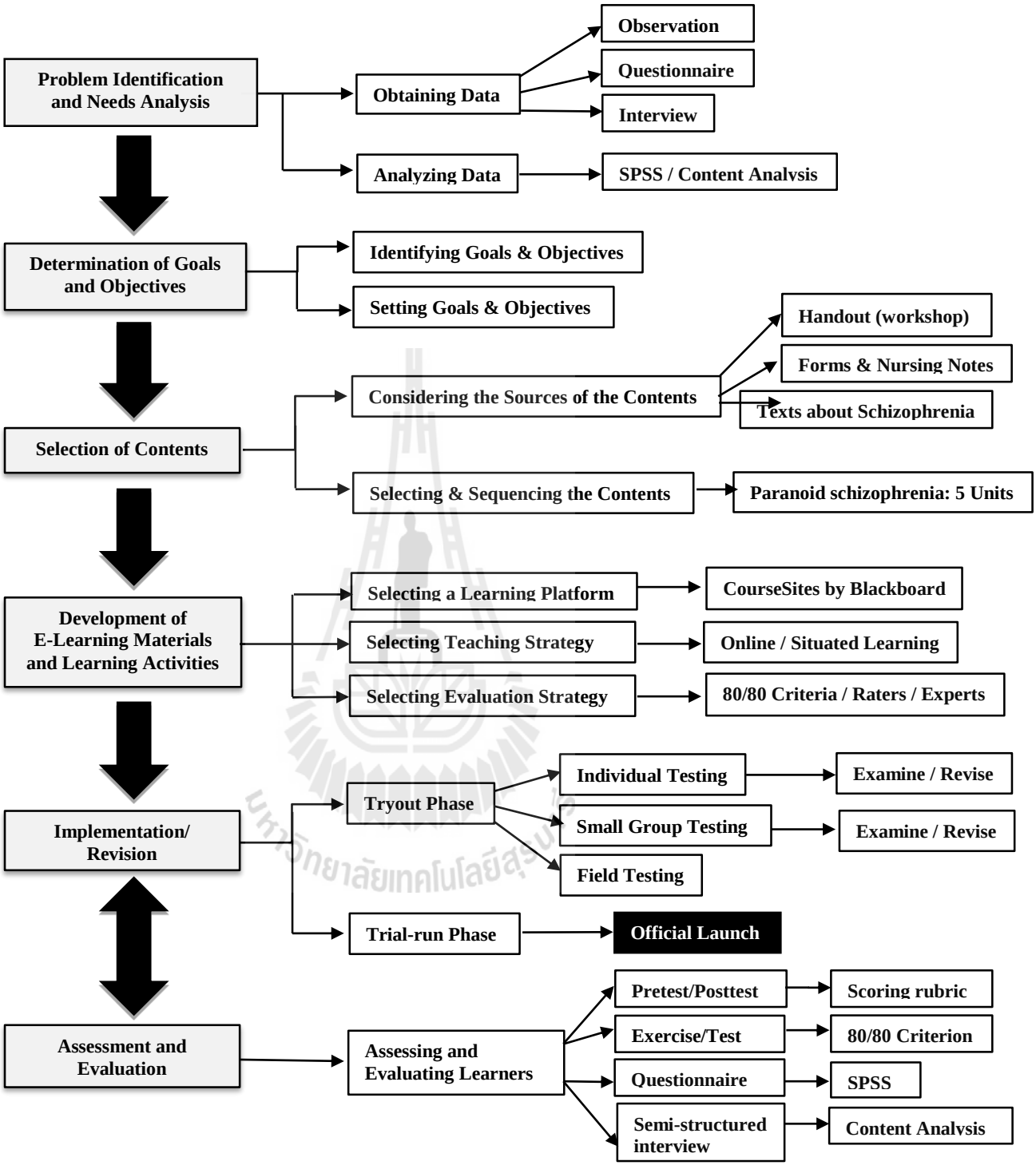


Figure 3.3: The Modified ISD Model

The six phases and twelve steps of the modified ISD model are described as follows:

Phase 1: Problem Identification and Needs Analysis

Step1.1: Obtaining data

Step 1.2: analyzing data

Phase 2: Determination of Goals and Objectives

Step 2.1: Identifying goals and objectives

Step 2.2: Setting goals and objectives

Phase 3: Selection of Contents

Step 3.1: Considering the sources of the contents

Step 3.2: Selecting and sequencing the contents

Phase 4: Development of E-Learning Materials and Learning Activities

Step 4.1: Selecting a learning platform

Step 4.2: Selecting a teaching strategy

Step 4.3: Selecting an evaluation strategy

Phase 5: Implementation / Revision

Step 5.1: Tryout Phase

Step 5.2: Trial run Phase

Phase 6: Assessment and Evaluation

Assessing and evaluating learners

The following section describes the steps in each phase.

Phase 1: Problem Identification and Needs Analysis

Step1.1: Obtaining data

The aim of the modified ISD model is to provide logical and easy to follow steps in designing and constructing a fully-online program that suits the needs of learners. So, in the first step, instructors could identify the problems and needs of learners through the use of observation, a questionnaire, and an interview to collect data regarding learners' personal information, learning constraints, learning conditions, background, preferences, English proficiency levels, and the topics for study. Thus, information could be acquired on the learners' language ability, the questionnaire could collect demographic or attitudinal information, and the interview to gather in-depth information concerning learning conditions or background. Instructors could use the obtained data to design a suitable learning program and experience for the learners in a specific context. In this study, several questions were asked to determine the learners' characteristics based on six core assumptions of Andragogy: needs to know, self-concept, role of prior experience, readiness to learn, orientation to learning, and motivation for study.

Step 1.2: analyzing data

The data obtained was analyzed using the Statistical Package for the Social Sciences (SPSS) and the method used was one of content analysis. The SPSS can be used to find the mean average of learners' information such as gender or age. It is also used to calculate the number or the frequency, such as the number of respondents who had e-Learning experience or the number of hours spent on the Internet daily. The analysis helped instructors understand more about the learners, what they were like, what, why, and how they wanted to study the program that was being designed and

constructed. The data acquired in this phase affected components in other phases and steps in this model.

Phase 2: Determination of Goals and Objectives

Step 2.1: Identifying goals and objectives

Learning goals and objectives for the program were identified once instructors obtained sufficient data for deciding what topics the learners wanted to learn. Learners chose the topic they wanted to learn because they expected to gain the knowledge and skills they needed for personal or professional development. So, a question such as "what do you expect to gain from learning this program / module?" could reveal learners' expectations toward learning. Ideally, both instructors and learners should agree on the same learning goals and objectives, so it is recommended that learners be involved in this step.

Step 2.2: Setting goals and objectives

Instructors could set the goals and objectives for the whole program and for individual modules. The goals and objectives help direct the design of the learning content, materials, activities, practices, and assessments. Suitable and realistic goals and objectives that the learners agreed on would enable them to engage more in learning and achieve the performances they desired.

Phase 3: Selection of Contents

Step 3.1: Considering the sources of the contents

Instructors should note that learners can engage more in learning if they can relate the contents or materials to their own experiences. Hospital documents, like nursing notes and patient charts, for example, offer more authentic content for designing and constructing an online program on shift reports for psychiatric nurses

than textbooks about general psychiatry and mental health. Therefore, including sources of content that learners are familiar with is recommended because learners can predict the content to improve their comprehension and make learning less challenging.

Step 3.2: Selecting and sequencing the contents

It is important for instructors to be able to analyze the nature of the content before deciding whether the sequence should be organized hierarchically or procedurally. In this study, the content on giving shift reports on patients with schizophrenia contain facts and concepts of information pertaining to schizophrenia in general leading up to the signs and symptoms, and the examples of shift reports on patients with paranoid schizophrenia. Instructors are recommended to select and sequence the content based on the established goals and objectives of the program, so that learners acquire the necessary knowledge or skills after studying on the program. It is also important that learners find the content familiar and meaningful so they can manage their learning independently in an online environment where instructors' roles are minimal.

Phase 4: Development of E-Learning Materials and Learning Activities

Step 4.1: Selecting a learning platform

It is important that learners are self-directed in their learning so, in designing and constructing an online program, instructors should be aware of the level of learners' computer/IT skills, because a lack of or insufficient computer/IT skills could impede learning. In this study, the criteria in selecting a learning platform are user-friendliness, accessibility, and system stability. Instructors were able to determine how simple or sophisticated the platform should be based on the information obtained in the Problem Identification and Needs Analysis Phase. Questions such as "Have you ever had an e-

Learning experience?" or "Will you be able to learn entirely by yourself online?" helped instructors decide whether learners are novice or experienced online learners.

Step 4.2: Selecting teaching strategy

A suitable teaching strategy should be in line with the goals and objectives of the program. Teaching strategies may be similar or different in each module. For example, the English for Psychiatric Nurses (EPN) program aims to enhance the oral presentation skills of Thai registered psychiatric nurses to enable them to give verbal shift reports in English on patients with paranoid schizophrenia. In order to achieve the goal, once learners gain sufficient vocabulary, phrases, and grammar, they should be able to construct knowledge or practically form comprehensible sentences for shift reports by themselves. So the teaching strategies used throughout the program involve recognition, repetition, and examples.

Step 4.3: Selecting evaluation strategy

To investigate whether the designed and constructed program is efficient or not, instructors should set a criterion that is realistic in terms of the ability of learners. In this study, the E1/E2 efficiency index was set at 80/80. The score of E1 obtains from the exercises learners completed while learning and the score of E2 comes from the tests they completed after finishing each module. However, 80 is not a magical number. Instructors are able to adjust the criterion after the program is implemented in the tryout phase. Thus, the criterion can be higher or lower than 80/80 depending on the learners and the nature of the topics taught in the program.

Phase 5: Implementation / Revision

Step 5.1: Tryout Phase

There are three tryout steps suggested in the modified ISD model. These steps are the individual test, the small group test, and the field test. The participants in each test should not be same persons. In this study, there are three participants in the individual test, six in the small group test, and 30 in the field test. The number of participants in the field test is preferably the same number as in the experiment. The tryout phase allows instructors to examine whether the program is valid, reliable, and efficient. Revisions have to be undertaken if the program is found not to be valid, reliable, or efficient.

Step 5.2: Trial run Phase

After the program has been designed and constructed it is tested in three tryout steps, and it is launched in the trial run phase. In this study, 30 registered psychiatric nurses participated on a voluntary basis. They were informed of the goals and objectives of the EPN program and they were trained to use the program prior for individual and independent study. They produced verbal shift reports on patients with paranoid schizophrenia before and after studying the program and they provided information and feedback for the questionnaire and the interview.

Phase 6: Assessment and Evaluation

Assessing and evaluating the learners

There is a need to evaluate the learners in terms of knowledge, skills, and attitudes to examine whether the program which had been designed and constructed helped to achieve these desired outcomes. In general, the evaluation can be done before, during, or after completion of the program. However, in this study, the 80/80 standard

criterion were measured for the efficiency of the program in determining learners' knowledge gain, their oral presentation skills scores were given by two raters who assessed their ability to perform verbal shift reports in English before and after studying the program, and the questionnaire and the semi-structured interview questions were employed to explore their attitudes toward the program.

3.4.2 The EPN Program

The EPN program was designed and constructed by the researcher based on the phases and steps identified in the modified ISD model. The following are detailed descriptions of how the researcher designed and constructed the EPN program according to the six phases of the modified ISD model adopted in this study.

Phase 1: Problem Identification and Needs Analysis

The researcher observed the workshop on "Nursing Process and Documentation for Mental Health Nurses" held at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital in January, February, and March, 2013. The three-day workshop was taught in English and Thai by three nurse educators from Boromarajonani College of Nursing, Praputthabat. During the workshop, the researcher observed that a number of RPNs had difficulty learning, communicating, and answering questions in English. Most of them read from prepared scripts when they were assigned to give a verbal presentation on shift reports. Some of them wrote the scripts and the pronunciation in Thai because they could not pronounce words such as cases, demonstrate, and schizophrenia correctly if written in English. Also, many RPNs who had to leave the classroom due to work-related calls found they were unable to follow the class and they were frustrated because they could not catch up with the rest of the class. Therefore, from these observations, the researcher concluded that most of the RPNs have a low proficiency in English and

a lack of time for studying in a classroom-based environment due to their work conditions and responsibilities.

After the problems were identified, the researcher obtained data from the RPNs in order to analyze their needs by constructing a specifically designed set of questionnaires to elicit (1) demographic information, (2) their interest and ability to learn online, (3) their attitudes on how they should study the EPN program, and (4) other suggestions. Then, once the questionnaires were returned, the researcher proceeded to analyze the data using both a quantitative and qualitative methodology. Descriptive statistics and content analysis were employed respectively. Finally, the researcher randomly selected 10 RPNs for a semi-structured interview session to obtain feedback in section 3 and section 4 of the needs assessment analysis questionnaire.

Phase 2: Determination of Goals and Objectives

Once sufficient information was gathered from the needs analysis, the researcher determined and set the learning objectives and goals based on the results obtained from the content analysis. Determining and setting the main objectives was a relatively simple task because a number of RPNs clearly provided written statements on what they expected from the program. Since the RPNs were encouraged to give verbal shift reports in English on the wards, the ultimate learning goal was to enhance their oral presentation skills, so they could give reports more correctly, fluently, and confidently. Although the learning objectives for each unit may slightly vary depending on the topics, the RPNs should know the correct pronunciation of frequently used words and how to apply their knowledge of of new vocabulary, phrases, and grammar to successfully hand over shift reports after studying on the EPN program.

Phase 3: Selection of Content

In selecting specific topics for the course content, aside from considering the information gathered during the needs assessment survey, the researcher also consulted the nurse administrators and the nurse educators in order to decide on the most suitable content for the RPNs' needs. The final topic for the content related to giving shift reports in English in the field off psychiatric and mental health nursing was making shift reports on patients with paranoid schizophrenia. Apart from the feedback from the RPNs and the suggestions offered by the nurse administrators and the nurse educators, another major reason for specifically selecting paranoid schizophrenia instead of covering other illnesses, such as schizophrenia in other subtypes (e.g., catatonic, undifferentiated), mental and behavioural disorders due to use of alcohol, bipolar affective disorder, or depressive episodes, was because there are statistical records provided by the hospital that indicated that the highest number of admitted patients with paranoid schizophrenia was from 2007 – 2013 (See Appendix G). From this information, it was assumed that the RPNs have experience in making reports on patients with paranoid schizophrenia more frequently than with other mental illnesses. Furthermore, certain vocabulary and phrases found in the reports and notes on patients with paranoid schizophrenia may be recycled, for example, for those patients with mental and behavioural disorders due to the use of alcohol.

Once the main topic was settled, the sources needed for creating the content were sought. The researcher relied on three major sources when considering and selecting the most appropriate content for the program. The first source was based on the handout from the workshop on "Nursing Process and Documentation for Mental Health Nurses" in which the nurse educators have taken the whole part of Chapter 7:

The Nursing Process in Psychiatric/Mental Health Nursing from a book called *Essentials of Psychiatric Mental Health Nursing: Concept of Care in Evidence-Based Practice* authored by Mary C. Townsend. The second source was the English version of two shift report forms created by the nurse administrators of Nakhon Ratchasima Rajanagarindra Psychiatric Hospital and the nurse educators of Boromarajonani College of Nursing, Praputthabat.

The third source came from 50 inpatient cards (IPD cards) and nursing notes that the researcher was given special permission to study for the sake of this research only. The researcher scrutinized the IPD cards and nursing notes with extreme caution since the basic information contained, especially on the IPD cards, identification details of the patients such as names, ages, and addresses. Consequently, if this information was ever leaked or released, it would cause serious ethical issues to the hospital and the researcher. For such sensitive reasons, the researcher respected the rights of the persons whose personal information appeared on documents for the admission of patients by avoiding learning or mentioning personal information and focusing only on the information in other sections. In short, the researcher studied the IPD cards and nursing notes only to note the vocabulary, phrases, abbreviations and acronyms used in these documents.

After considering the content from these three main sources thoroughly, the researcher decided on the sequences of the EPN program by dividing the content into 5 units. The five units were (1) Schizophrenia, (2) Paranoid Schizophrenia, (3) Violence and Escape, (4) Depression and Suicide Risk, and (5) Information Transfer. There were two to four topics in each unit and there were sections for learning content, audio media, vocabulary and phrases, grammar, exercises, and unit tests that were relevant and

helpful for giving shift reports on patients with paranoid schizophrenia. The question items for the exercises and tests available in all units were in true or false, matching, and multiple-choice formats. The manipulation of static texts, images, and sounds were individually managed to suit the content in each unit and sub-topics.

Phase 4: Development of E-Learning Materials and Learning Activities

During the phase of developing e-Learning materials and learning activities, the researcher decided to use a Learning Management System (LMS) platform called CourseSites by Blackboard. As a result, CourseSites by Blackboard™ was chosen for this study. Then, the researcher selected a teaching strategy that suits the RPNs who were adult learners learning English as a foreign language for a specific purpose. The strategy used was situated learning. According to the principles of situated learning, the tasks or situations used as learning activities should fit the RPNs' professional experiences, so that they become more engaged in learning. Furthermore, the tasks or situations should be authentic and real so that the RPNs are able to transfer the knowledge they acquire and apply it. The content and assessments in the EPN program were evaluated for accuracy of content and appropriacy of language by three experts from the fields of Psychiatric and Mental Health Nursing. The measurement and assessment were based on the 80/80 standard criterion.

Phase 5: Implementation / Revision

The EPN program was tested three times in the tryout phase: an individual test; a small group test; and a field test to ensure the quality and efficiency of the scoring rubric, the EPN program, the questionnaire, and the interview before they were implemented in the trial phase with the experiment group. During the three tryouts, 39 RPNs were asked to perform an oral pretest; complete exercises and tests in five

modules; perform an oral posttest; and provide their attitudes and feedback in the questionnaire and semi-structured interview to obtain data for the improvement of the quality and efficiency of the instruments. After the data were collected and analyzed during the tryouts, it was found that the program required further modifications.

The researcher carefully revised the EPN program by discarding, adding, and adjusting content, media, and assessments to better suit the RPNs' needs, technology skills, and English proficiency levels. The information obtained during the needs assessment analysis phase showed that some of the RPNs had little or no experience of studying through e-Learning (Tumsaduak & Suppasetseree, 2014). So, during the field test, the researcher had to clearly explain to the RPNs both in person and in print (e-mail and handouts) what they would be learning and how. Also, more images and descriptions were added to the "How To" section to give the RPNs more confidence when navigating through all five units in the EPN program.

Phase 6: Assessment and Evaluation

In this study, the scoring rubric was used to assess the RPNs' oral presentation skills during the pretest and posttest, the exercises and tests were used to check their learning outcomes on the knowledge they acquired, and the questionnaire and the interview questions were used to explore their attitudes toward the EPN program. First, the RPNs were asked to perform an oral pretest and posttest before and after completion of the EPN program using the shift report forms (See Appendix A). The scoring rubric was employed for the oral pretest and the posttest. Then, to measure the efficiency of the EPN program, the 80/80 standard criterion was applied. Finally, to acquire the RPNs' attitudes toward the EPN program, the questionnaire and the semi-structured interview were administered.

3.4.3 Lesson Plan

The lesson plan contained learning objectives, exercises, tests and materials on the vocabulary, phrases, and grammar appropriate to giving shift reports on patients with paranoid schizophrenia. The lesson plan was required because, according to the principles of adult learning or andragogy, adults need to know what, why, and how they should learn something before they start learning it (Knowles et al, 1998). Thus, the lesson plan helped the researcher tailor learning to better suit the needs of the RPNs.

The lesson plan on giving shift reports on patients with paranoid schizophrenia comprised five modules. The following procedures were adopted for the writing of the lesson plans for each module:

1. The researcher studied the content regarding shift reports on patients with paranoid schizophrenia from three main sources: (1) Chapter 7: The Nursing Process in Psychiatric/Mental Health Nursing from a book called *Essentials of Psychiatric Mental Health Nursing: Concept of Care in Evidence-Based Practice* written by Mary C. Townsend, (2) the English version of the shift report forms, and (3) the IPD cards and nursing notes.
2. The researcher wrote the plan by grouping general and specific vocabulary and phrases, grammar, learning activities, and methods of assessment and evaluation into five modules.
3. The lesson plan was examined and checked for validity. The appropriateness of the objectives, content, practices, tests, and materials for the EPN program were also assessed by experts in the fields of English Language Teaching and Psychiatric and Mental Health Nursing.

4. The lesson plan was revised and used as a guideline to construct the EPN program.

3.4.4 Scoring Rubric

A scoring rubric is an evaluation tool which, in this study, was used to assess the oral presentation skills of the RPNs on giving shift reports on patients with paranoid schizophrenia. It was adapted from the Oral Presentation Rubric provided by the Department of Educational Leadership and Policy Studies, IOWA State of University. The adapted rubric was designed based on the expected outcomes and performances of the RPNs. Each rubric consists of a set of scoring criteria and point values. The criteria are grouped into three categories, so the nurse administrators, the nurse educators, and the RPNs were able to discriminate between the categories by level of performance. The analytic scoring rubric used in this study was categorized into (1) Accuracy of Content, (2) Use of Language, and (3) Pronunciation. The scoring rubric can be found in Appendix C.

The RPNs' performance in oral presentation skills during the pretest and posttest were measured. During the oral pretest and posttest, the RPNs were asked to verbally hand over shift reports. They could follow the shift report forms which were developed by the hospital (See Appendix B). The information regarding the patients during the pretest/posttest could be made-up as long as the reports were comprehensible and appropriate. A method to investigate the inter-rater reliability was adopted to determine whether or not two or more raters produced the same or similar result when the same instrument or standard was applied. In this study, one nurse administrator and one nurse educator were used as raters. They followed the criteria described on the scoring rubric modified by the researcher. How well the RPNs gave verbal reports in

terms of accuracy of content, use of language, and pronunciation were based on the scoring rubric criteria (See Appendix C). Prior to conducting the pretest, the researcher organized a brief session to clarify and discuss each criterion on the scoring rubric with the raters to avoid any misunderstandings in each category.

The researcher adopted two shift report forms in English which were co-created by the nurse administrators from Nakhon Ratchasima Rajanagarindra Psychiatric Hospital and the nurse educators from Boromarajonani College of Nursing, Praputthabat, Saraburi (See Appendix A and Appendix B). These forms are currently used by the RPNs for giving verbal shift reports.

The following steps describe how the scoring rubric was adapted and tested for efficiency.

1. The researcher studied the oral presentation rubric produced by the Department of Educational Leadership and Policy Studies, IOWA State of University and took notes on the categories, criteria, and descriptors.
2. The researcher contacted the nurse administrators and a nurse educator to discuss the criteria and descriptors to be listed in the adapted scoring rubric.
3. The researcher tailored the scoring rubric by including three categories and four scoring criteria.
4. The researcher translated the rubric into Thai.
5. The researcher arranged a training session to ensure the two raters both understood the criteria in each category of the adapted scoring rubric.

3.4.5 Questionnaire

The questionnaire was used to explore the RPNs' attitudes toward learning through the EPN program. This questionnaire comprised 24 items in three parts and its

purpose was to collect (1) demographic information, (2) attitudes on the EPN program, and (3) attitudes toward learning through the EPN program. The standard five-point Likert rating scale categorized from “strongly agree” to “strongly disagree” was applied. The questionnaire is shown in Appendix D. The five-point Likert rating scale is categorized as follows:

5 = Strongly agree

4 = Agree

3 = Undecided

2 = Disagree

1 = Strongly disagree

In developing the questionnaire for this study, the researcher used the following procedures:

1. The researcher studied how to create a questionnaire.
2. The researcher set the objectives of the questionnaire and produced question items for each part in both the Thai and English versions.
3. The questionnaire was checked for validity by experts in the fields of English Language Teaching, Psychiatric and Mental Health Nursing, and Instructional Systems Technology.
4. The researcher revised and improved the questionnaire based on the experts’ feedback.
5. The researcher used the questionnaire during the tryout steps and ensured the reliability reached over .80.

3.4.6 Semi-Structured Interview

The researcher explored the RPNs' attitudes and feedback regarding learning through the EPN program on giving shift reports on patients with paranoid schizophrenia by conducting a face-to-face semi-structured interview. The RPNs were randomly selected to answer seven questions which took no more than 15 minutes each. The set of written questions for the semi-structured interview was checked for validity by experts in the fields of English Language Teaching and Psychiatric and Mental Health Nursing.

The researcher followed the following procedures in order to develop the guided interview questions:

1. The researcher studied how to produce questions for a semi-structured interview.
2. The researcher identified the scope and objectives of conducting the interview.
3. The researcher created guided interview questions and had them checked for validity by the experts in the fields of English Language Teaching and Psychiatric and Mental Health Nursing in order.
4. The researcher revised and improved the interview questions based on the experts' feedback.

3.4.7 Evaluation Forms

The evaluation forms for assessing the validity of each instrument were administered by experts the fields of English Language Teaching, Psychiatric and Mental Health Nursing, and Instructional Systems Technology. The forms for evaluating the modified ISD model, the EPN program, and the questionnaire were

handed to the experts in all fields while the forms for the lesson plan, the scoring rubric and the interview questions were forwarded to the experts only in the fields of English Language Teaching and Psychiatric and Mental Health Nursing.

The following were the steps for producing the evaluation forms for each of the instruments.

1. The researcher studied and reviewed the evaluation forms for the modified ISD model, the EPN program, the lesson plan, the scoring rubric, the questionnaire, and the semi-structured interview from various sources.
2. The researcher adapted the forms by tailoring information to suit the purposes of each instrument in assessing what needed to be measured.
3. Then, the forms were delivered to experts in the fields of English Language Teaching, Psychiatric and Mental Health Nursing, and Instructional Systems Technology.
4. The researcher revised and improved each evaluation form based on the experts' feedback.

3.5 Pilot Study

In order for the researcher to determine whether the EPN program was efficient, a pilot study was conducted in three stages as follows:

3.5.1 The Individual Test

Three RPNs were randomized for the first stage of the pilot study during the individual test. Prior to learning through the EPN program on giving shift reports on patients with paranoid schizophrenia, the three RPNs were asked to take an oral pretest. Also, before and after learning, the RPNs completed exercises to measure their

knowledge of the overall unit. The exercises were in multiple-choice, true or false and matching formats. After the students completed their study of all five units, they took an oral posttest, completed a questionnaire, and answered the semi-structured interview questions. The RPNs' data regarding their attitudes toward the EPN program were collected and analyzed in order to improve the quality of the program.

3.5.2 The Small Group Test

Six RPNs were assigned for the second stage of the pilot study during the individual test. First, they were asked to take an oral pretest. Then, before and after learning, the RPNs completed exercises to measure their knowledge of the overall unit. The exercises were in multiple-choice, true or false, and matching formats. After they completed the study of all five units, they took an oral posttest, completed a questionnaire, and answered the semi-structured interview questions. The RPNs' data regarding their attitudes towards the EPN program were collected and analyzed to ensure the program was efficient enough to reach the 80/80 standard criterion.

3.5.3 The Field Test

Thirty RPNs who were not in the sample of the current study were asked to take an oral pretest and to complete exercises before and after learning in order to measure their overall knowledge of each unit. The exercises were in multiple-choice, true or false, and matching formats. Upon the completion of the EPN program, an oral posttest was given. The RPNs' E1/E2 scores obtained from the EPN program were checked for efficiency based on the 80/80 standard criterion. The RPNs' attitudes regarding the EPN program were collected, analyzed, and examined to improve the quality of the EPN program before implementation on the experiment.

The achievement scores of the exercises (E1) and the unit tests (E2) were estimated and calculated to test the efficiency of the EPN program. The formula is as follows:

$E_1 = \frac{\bar{x}}{A} \times 100$

E_1 = Efficiency of the process

$\bar{x}$ = Average score all RPNs obtain from the exercises

A = Total score of the exercises in the units

$E_2 = \frac{\bar{x}}{B} \times 100$

E_2 = Efficiency of the product

$\bar{x}$ = Average score all RPNs obtain from the tests

B = Total score of the tests in the units

(Brahmawong, 1978)

3.6 Data Collection

The data regarding the RPNs' learning achievements after studying the EPN program and the attitudes toward the program were assessed both quantitatively and qualitatively as follows.

3.6.1 Oral Pretest and Posttest

The RPNs who participated in the study recorded their performance on giving a verbal shift report on patients with schizophrenia before studying the EPN program. Then they were asked to record their shift report on patients with paranoid schizophrenia again after they completed the EPN program and submit the recording to the researcher within a week.

3.6.2 E1/E2 Scores

The RPNs completed the exercises for the collection of the E1 scores and the unit tests for the E2 score in all five modules. The RPNs were free to organize their own learning, but they were required to finish every exercise and unit test within a month. They were also allowed to retake the exercises and unit tests up to three times and the EPN program would record only the highest score.

3.6.3 Questionnaire

The RPNs answered the questionnaire which was available in the EPN program within a week after they had completed the EPN program and performed the oral pretest and posttest. The questionnaire comprised three parts and 24 items. There were five items in the first part asking for personal information; the second part contained 13 items asking about their attitudes toward the EPN program in terms of its content, assessment, and outlook; and the third part consisted of six questions regarding the experiences of the RPNs toward learning through the EPN program.

3.6.4 Semi-structured Interview

Twelve RPNs were randomly selected for a semi-structured interview session to obtain additional feedback regarding their experiences of learning through the EPN program. The interviewees spent less than fifteen minutes to answer seven questions individually. In the opinion of the researcher, twelve interviews were sufficient for this study, since no new information would have been obtained by conducting further interviews.

3.7 Data Analysis

The scores on the oral presentation skills performance provided by the two raters, the E1/E2 scores acquired from the EPN program, and the data obtained from the questionnaire and the semi-structured interview were analyzed and interpreted both quantitatively and qualitatively using the Statistical Package of Social Sciences (SPSS) and using content analysis.

3.7.1 Quantitative Data Analysis

The quantitative data analysis included the data obtained from the exercises (E1), the unit tests (E2) and the questionnaire. The data were coded and analyzed with the Statistical Package for the Social Sciences (SPSS) which uses descriptive statistics, such as frequency, percentages, mean scores, and standard deviations and inferential statistics, the paired sample T-test and the Pearson product-moment correlation.

The demographic data acquired from the questionnaire were calculated, analyzed, and interpreted using descriptive statistics, such as frequency, percentage, mean scores, and standard deviations. The RPNs' attitudes toward e-Learning and toward learning through The EPN program were calculated, analyzed, and interpreted using the criteria of means. Table 3.1 presents the criteria for interpreting the data according to the five-point Likert scale for individual items for the second and third parts of the questionnaire.

Table 3.1: Criteria for Interpreting Five-Point Likert Scales for Individual Items

Ranges	Statements
4.50 – 5.00	Strongly agree
3.50 – 4.49	Agree
2.50 – 3.49	Undecided
1.50 – 2.49	Disagree
1.00 – 1.49	Strongly disagree

Table 3.2 describes the mean ranges of the criteria for interpreting the data on the attitudes toward the use of the EPN program in Part 2 of the questionnaire. The interpretations, based on the mean ranges, were that the EPN program was "very appropriate", "appropriate", "neutral", "not appropriate", and "not at all appropriate". Table 3.3 explains the criteria for the attitudes toward learning through The EPN program in Part 3 of the questionnaire. The interpretations, based on the mean ranges, were translated as; the RPNs had "very good attitudes", "good attitudes", "neutral attitude", "bad attitude", and "very bad attitudes".

Table 3.2: Criteria for Interpreting Five-Point Likert Scales for Part 2

Means	Interpretation
4.50 – 5.00	The EPN program is very appropriate.
3.50 – 4.49	The EPN program is appropriate.
2.50 – 3.49	The EPN program is neutral.
1.50 – 2.49	The EPN program is not appropriate.
1.00 – 1.49	The EPN program is not at all appropriate.

Table 3.3: Criteria for Interpreting the Five-Point Likert Scale for Part 3

Means	Interpretation
4.50 – 5.00	RPNs have very good attitudes toward learning through the EPN program.
3.50 – 4.49	RPNs have good attitudes toward learning through the EPN program.
2.50 – 3.49	RPNs have neutral attitudes toward learning through the EPN program.
1.50 – 2.49	RPNs have bad attitudes toward learning through the EPN program.
1.00 – 1.49	RPNs have very bad attitudes toward learning through the EPN program.

3.7.2 Qualitative Data Analysis

The qualitative data analysis included the data obtained from the six semi-structured interview questions. The data obtained were transcribed and interpreted through the method of content analysis.

3.8 Summary

This chapter provided descriptions of the research design, the population and sample, the variables, the instruments, the data collection, and the data analysis. It also presents in detail the steps for the development and efficiency testing of the modified ISD model, the EPN program, the scoring rubric for the oral pretest and posttest, the questionnaire, the interview questions, and the evaluation form. The main aim of this study is to develop the modified ISD model and adopt it as a framework for the design and construction of the EPN program. The EPN program was conducted, examined, and revised in the three tryouts to ensure that the EPN program was efficient based on the 80/80 standard criterion before it was administered to the 30 RPNs who were the participants in this experiment. The RPNs performed the oral pretest and posttest before and after learning through the EPN program in order to investigate whether the EPN program enhanced their oral presentation skills on giving shift reports or not. The data regarding the attitudes toward the EPN program were collected using the questionnaire and the semi-structured interview questions. The data was analyzed using both quantitative and qualitative methods.

CHAPTER 4

RESULTS OF THE STUDY

The results of the study are divided into four sections. The first section describes the development of the modified ISD model in each phase and step. The second section reports the efficiency of the EPN program based on the E1/E2 efficiency index which was set at 80/80. The third section explains the RPNs' performance in oral presentation skills from the scores given by the two raters who used the scoring rubric. The last section reports the RPNs' attitudes toward learning through the EPN program based on the data obtained from the questionnaire and the interview questions.

4.1 Results of the Development of the Modified ISD Model

A modified ISD model was used as a framework for designing and constructing an English for Psychiatric Nurses (EPN) program for Thai registered psychiatric nurses (RPNs) to enhance their oral presentation skills on giving shift reports on patients with paranoid schizophrenia. For the development of the modified ISD model, the researcher reviewed the principles of Andragogy, the constructivist theory, Self-Directed Learning, Situated Learning, and Instructional System Design models, namely, the ADDIE model, the Dick and Carey model, and the SREO Plan in order to reap benefits from each of the principles, theories, and models and adapt them into the phases and steps of this model.

The principles of Andragogy were used in the development of the modified ISD model due to its core learning assumptions which focus primarily on learners. These assumptions are learners' need to know, self-concepts, prior experience, readiness to learn, orientation to learning, and motivation to learn. The first phase, the Problem Identification and Needs Analysis, was added as the most important phase because information acquired through questioning or observing the learners' core learning assumptions affects the other five phases in designing and constructing the EPN program. This phase involves two steps: obtaining data and analyzing data. The methods of obtaining data are varied depending on the situation. In this study, the methods used for collecting information were observation, questionnaires, and interviews. The Statistical Package for the Social Sciences (SPSS) and the content analysis were used to analyze the collected data.

Once the researcher had decided based on the data obtained in the phase of Problem Identification and Needs Analysis that the learners needed to learn how to give shift reports in English, the second phase, the Determination of Goals and Objectives followed. In this phase, the learners were made aware that the goal of studying on the EPN program was to enhance their oral presentation skills in giving shift report on patients with paranoid schizophrenia. After the main goal was identified and established, the RPNs were asked to provide information regarding what they should achieve. In this study, the researcher first listed the objectives based on the nature of the subject matter and the skills needed which were determined by the RPNs. Second, they discussed the objectives and selected the ones they desired to achieve. Last, the objectives that were agreed by the researcher and the RPNs were set.

In the third phase, the researcher selected the contents by considering the sources and selecting the sequence of the content. According to the principle of Situated Learning, the contents should be relevant and authentic. Hence, in the step of considering the sources of the content, the researcher explored the sources of contents that were directly used by the learners. A letter of permission was approved by the hospital administration before the researcher could study the notes and reports of the RPNs which were recorded in Thai. In addition to the nurses' notes and shift reports, the handouts used during the workshop on the "Nursing Process and Documentation for Mental Health Nurses" were considered. In the step of sequencing the contents, the researcher arranged the contents from easy to difficult, and also sequenced them in different modules according to topics in order to allow the RPNs to learn independently in a non-linear manner.

The data obtained in the first three phases were employed in the Development of E-Learning Materials and Learning Activities phase. In this phase, the researcher made decisions on selecting a learning platform, teaching strategy, and evaluation strategy before developing the EPN program. In selecting a platform that was suitable for the RPNs, the researcher considered the information gathered from the Problem Identification and Needs Analysis phase. Information such as the RPNs' e-Learning experiences, needs for simple or sophisticated learning materials, and access to computers and the Internet were considered. The RPNs reported that they had had very little to no experience in online learning, so the platform was selected based on user friendliness to help them navigate the program with ease. For the selection of teaching and evaluation strategies, the RPNs agreed that they were capable of learning entirely

by themselves with minimum instruction required from the instructor, so learning was conducted and evaluated in a fully online environment.

When the materials and activities were developed for the EPN program, the researcher launched it in two main steps. The first step, the tryout phase, was divided into three sub-steps: the individual testing, the small group testing, and the field testing. The EPN program was tested to ensure that there was no technical problems and the contents, materials, practices, and assessments were appropriate for the RPNs' English proficiency level. The RPNs who participated in the three tryout steps used the EPN program independently and individually and offered feedback to the researcher for revisions. The efficiency of the EPN program was determined by the 80/80 standard criterion. The scores collected from the practices and the tests in five modules were used to make the calculations. Once the scores of the practices and the tests reached the criterion of 80/80, the EPN program was launched in the trial run phase.

The last phase of the modified ISD model involved assessing and evaluating learners. In this study, the goal of the EPN program was to enhance the RPNs' oral presentation skills. Therefore, in order to determine whether this goal was fulfilled, the scores each RPN achieved on giving verbal shift reports in English before and after using the EPN program, the scores from the practices and tests in five modules, and the information and feedback gathered from the questionnaire and the interview were evaluated. The positive results obtained from this phase confirmed that the EPN program was successfully designed and constructed to be efficient by following the phases and steps in the modified ISD model.

The complete version of the modified ISD model comprises six major phases and twelve steps. The six phases include: problem identification and needs analysis,

determination of goals and objectives, selection of contents, development of e-Learning materials and learning activities, implementation / revision, and assessment and evaluation. The following are the phases and steps of the modified ISD model developed by the researcher as a framework for designing and constructing the EPN program.

Phase 1: Problem Identification and Needs Analysis

Step1.1: Obtaining data

Step 1.2: analyzing data

Phase 2: Determination of Goals and Objectives

Step 2.1: Identifying goals and objectives

Step 2.2: Setting goals and objectives

Phase 3: Selection of Contents

Step 3.1: Considering the sources of the contents

Step 3.2: Selecting and sequencing the contents

Phase 4: Development of E-Learning Materials and Learning Activities

Step 4.1: Selecting a learning platform

Step 4.2: Selecting a teaching strategy

Step 4.3: Selecting an evaluation strategy

Phase 5: Implementation / Revision

Step 5.1: Tryout Phase

Step 5.2: Trial run Phase

Phase 6: Assessment and Evaluation

Assessing and evaluating learners

4.2 Results of the Efficiency of the EPN Program

The English for Psychiatric Nurses (EPN) program was launched in two phases: the tryout and the trial run. The tryout phase was implemented to evaluate the efficiency of the EPN program and to ensure that every learning module reached the targeted 80/80 standard criterion. There were three steps in the tryout phase; (1) the individual testing with three participants, (2) the small group testing with six participants, and (3) the field study testing with 27 participants. The trial run phase was executed after the 80/80 standard criterion of the E1/E2 efficiency index was met in the field study testing. The trial run phase involved 30 participants.

The participants in the tryout and the trial run phases were registered psychiatric nurses who work at a psychiatric hospital, have knowledge of mental health and psychiatry, and have experience in delivering verbal shift reports on patients with schizophrenia. The participants were of different ages ranging in age from their 20s to their 50s. Their levels of English proficiency were supposedly at the same level because English is not the language used at the workplace and none of them had taken a standardized English test. The results of the three steps of the tryout and the trial run phases are described and discussed in the following sections.

4.2.1 Results of the Individual Testing

The first tryout or the individual testing step was conducted with three registered psychiatric nurses. The main criteria in allocating the three participants in this tryout were based on whether or not the participants work at the psychiatric hospital, have knowledge of mental health and psychiatry, and have experience in giving shift reports on patients with schizophrenia. For the data collection process, the three participants were asked to give samples of brief shift reports in English as an oral pretest and posttest before and

after learning through the EPN program. Also, they were required to finish exercises and tests in all five modules, to complete the questionnaire and to answer the semi-structured interview questions. The scores acquired from the exercises and tests as well as the suggestions from the questionnaire and the interview questions were thoroughly considered. Revisions regarding content, media, exercises and tests were carried out to improve the efficiency of the EPN program. The E1/E2 scores of each module are presented in Table 4.1 and the details of the revisions are presented in Table 4.2.

Table 4.1: E1/E2 Scores of the Individual Testing

Individual Testing		
E-Learning Modules	**E1 Score (%)**	**E2 Score (%)**
Module 1: Schizophrenia	72.12	73.61
Module 2: Paranoid Schizophrenia	71.52	76.39
Module 3: Violence and Escape	71.11	75.00
Module 4: Depression and Suicide Risk	78.33	81.94
Module 5: Information Transfer	73.33	72.22
Module **1** – Module **5**	**73.33**	**75.83**

As can be seen in Table 4.1, the E1/E2 scores or the 80/80 standard criterion in almost all modules were not met. This first step of the tryout showed that the participants were unable to obtain over 80% of the scores in E1 in every module. However, they managed to achieve the score of 81.94 which was slightly above the 80% of the E2 score in Module 4. The participants' E1/E2 scores for each module were 72.12/73.61 in Module 1, 71.52/76.39 in Module 2, 71.11/75.00 in Module 3, 78.33/81.94 in Module 4, and 73.33/72.22 in Module 5. The E1/E2 cumulative scores were 73.33/75.83.

The EPN program failed to meet the 80/80 standard criterion in the first tryout because the participants found the content too difficult, the audio media too fast, and

the exercises and tests too many and too lengthy. Based on the participants' constructive feedback and suggestions, there were four main aspects which led to the failure to achieve the targeted scores. These aspects concerned (1) content and vocabulary, (2) media, (3) exercises and tests, and (4) language support. The details of the four main problems and revisions are provided in Table 4.2.

Table 4.2: The Revision of the EPN Program for the Individual Testing

Aspect	Problem / Suggestion	Revision

1. Content/ Vocabulary	1. The content is insufficient. (2.2,2.3,2.4,4.1, 5.1,5.2)
	2. The content is somewhat lengthy and difficult to understand. (1.3,1.4,2.2,2.3,3.1,3.2,5.2)
	3. The vocabulary is lacking and irrelevant. (1.3,1.4, 3.4,4.1)
		• Add more content to the suggested sub-units
		• Rewrite the content:
		  • discarding irrelevant content
		  • making it more concise
		  • use more common vocabulary, clues, and less complex sentences
		  • add clear and authentic examples
		• Add more practical and relevant vocabulary to the problematic sub-units

2. Media	1. There is too much text and/or too few images, tables or diagrams. (1.3,1.4,2.2,2.3,2.4,3.1,3.4,4.1) 2. The voice should be the same or similar throughout the modules. (all modules) 3. The speed of the narration in the audio files is too fast to follow. (all modules)	1. Add more images or pictures to arouse interest and use tables to summarize the content 2. Make the voice of the narrator consistent throughout the modules 3. Reduce the speed of the narrator to -1
3. Exercises/ Tests	1. There are too many questions. (Module 1-3) 2. There are too many difficult questions. (1.3,1.4,2.2,5.1,5.2)	1. Reduce the number of question items into 3-5 questions for exercises and 15 for tests 2. Add and reuse keywords to ease the difficulty of the questions
4. Language support	• The content and examples in the Grammar Focus section should be in Thai.	• Create the content in Thai for every subunit • Explain rules and usage in Grammar Focus in Thai

According to Table 4.2, several revisions were extensively undertaken to increase the scores of E1/E2 in all modules in this step. The alterations were conducted in four aspects: (1) content/vocabulary, (2) media, (3) exercises/tests, and (4) language support.

The first aspect involved two problems: content and vocabulary. According to the participants, the content in each module was either too broad or too limited. Therefore, all the content was reconsidered in terms of length and level of difficulty. This problem was addressed by eliminating any irrelevant content to make it more concise and by including examples or texts to make it more comprehensible. For instance, sentence examples were provided to help the participants understand the definitions of terms which appeared in 2.2 (Delusions), 2.3 (Hallucinations), and 2.4 (Thought Disorders) and examples of shift reports were arranged to better suit the needs of the participants and the nature of each of the inpatient wards.

As for vocabulary, the choice of words was seemingly the cause of the problem. The participants who have profound background knowledge in schizophrenia in Thai naturally tried to grasp the meaning of the text they read by relying on words that they were already familiar with. For this reason, it was inevitable that certain new and unknown words would confuse the participants. To solve this problem, common words were used and clues were given. For example, a less well-known word, such as “bother” was replaced by a more familiar word like “disturb”, so the participants found it easier to comprehend the text. Alternatively, instead of excluding new words, the conjunction “or” was used to help the participants make a better guess, for instance, the word “imitate” was used along a common word like “copy”.

The second aspect concerned two main types of media: visual and audio. According to the participant, some texts could be easily understood with images or tables. Hence, visual media like images were designed and added to clarify the content (i.e., 2.2, 2.3, 2.4, and 4.1) and tables were drawn up to organize the text more efficiently (i.e., 1.3, 1.4, 3.1, 3.4, and 4.1). Apart from the visual media, audio files were important components in helping the participants to learn correctly and to pronounce words confidently that they may have mispronounced initially. The audio files were created to narrate the content in every subunit. However, the participants found the audio files too fast and they found the different male and female voices confusing. To tackle these problems, all the audio files were recreated using the same American female voice with a reduced speed at -1. It should be noted that a variety of voices of different genders and accents is recommended so that learners are given more opportunities to become familiar with different pronunciations. However, the audio files in the EPN program were only the same American female voice in order to help the learners who had low English proficiency in English cope with the program.

For the third aspect, an inappropriate number of items and level of difficulty of the exercises and tests were two significant factors which contributed to the failure of achieving the 80/80 standard criterion. Both exercises and tests in each module were not consistent in terms of the number of questions. So, the questions for the exercises were intentionally reduced from 6 – 10 and then to only 3 – 5 questions for 4 subunits in Module 1 – 4 and for 2 subunits in Module 5. The test type for each exercise was either matching, true or false, or multiple-choice items. However, three test types which added up to 15 questions were deliberately included in each test. Furthermore, the stems and options in the multiple-choice items, true or false statements, and the terms and

definitions for matching questions related to choice of words and complexity of sentences were extensively revised.

The last aspect, language support, was required due to the needs of the nurses to comprehend English texts and to use grammar to form sentences for the shift reports. Despite the fact that the participants have a comprehensive knowledge of schizophrenia, it could not be guaranteed that they would understood the texts correctly. So, to address the problems of the students who only has a vague understanding of the meaning, Thai translations were provided in every subunit. Also, the grammar and usage were briefly explained in Thai to avoid unnecessary confusion.

With the aim of obtaining over 80% of E1/E2 scores for all modules, the revised and improved EPN program was subsequently launched in the small group testing step.

4.2.2 Results of the Small Group Testing

The second tryout step or the small group testing included six registered psychiatric nurses who work at the psychiatric hospital, have knowledge of mental health and psychiatry, and have experience in giving shift reports on patients with paranoid schizophrenia. The six participants performed oral tests by giving samples of shift reports before and after individually learning through the EPN program and after they had finished every exercise and test in the program. They also completed the questionnaire and answered the semi-structured interview questions. In this second tryout, the overall scores in most of the modules were reasonably improved. The details of E1/E2 scores of the small group testing are illustrated in Table 4.3.

Table 4.3: E1/E2 Scores of the Small Group Testing

Small Group Testing		
E-Learning Modules	**E1 Score (%)**	**E2 Score (%)**
Module 1: Schizophrenia	83.64	81.25
Module 2: Paranoid Schizophrenia	82.42	82.64
Module 3: Violence and Escape	76.11	81.94
Module 4: Depression and Suicide Risk	83.06	86.11
Module 5: Information Transfer	75	75
Module 1 – Module 5	**80.51**	**81.39**

As Table 4.3 shows, the scores obtained in Module 1, Module 2, and Module 4 exceeded 80% for both E1/E2 scores. The E1 score in Module 3 and both E1/E2 scores in Module 5 were still much lower than the set 80/80 standard criterion at 76.11, 77, and 75 respectively. The results signified that the exercises in Module 3 and both exercises and the test in Module 5 needed substantial revisions. The overall scores in this tryout were 83.64/81.25 in Module 1, 82.42/82.64 in Module 2, 76.11/81.94 in Module 3, 83.06/86.11 in Module 4, and 75/75 in Module 5. The E1/E2 scores in every module were 80.51/81.39.

Modifications, particularly in Module 3 and Module 5, were required even though considerable revisions had been undertaken in the individual testing step. According to the participants, the contents in Module 3 and Module 5 were too long and contained many vocabulary words which were unfamiliar and which led to problems with comprehension that affected the results of both the exercises and tests. To increase the E1/E2 scores, alterations were made in two aspects; (1) content and vocabulary and (2) the exercises and tests. The details are listed in Table 4.4.

Table 4.4: The Revision of the EPN Program for the Small Group Testing

Aspect	Problem	Revision
1. Content/ Vocabulary	• It was difficult to guess the meanings of unknown words. (3.1, 3.2, 3.4, 5.2)	• Use more common words • Add more words to the vocabulary lists • Provide word guessing techniques such as prefixes and suffixes
2. Exercises/ Tests	1. Some questions are too difficult. (3.1, 3.2, 3.4, 5.2) 2. Some stems, options, or statements are too long. (3.1, 5.2)	1. Use more common words and simplify the questions 2. Rewrite stems, options, or statements, making them more concise

Referring to Table 4.4, there were two aspects that needed to be adjusted in this step: (1) content and vocabulary and (2) exercises and tests. The modifications in content and vocabulary for Module 3 and Module 5 were made to handle the difficulty of the overall content particularly in 3.1 (Escape), 3.2 (Violence), 3.4 (PRN Medications), and 5.2 (Individual Case Reports). For example, in 3.2 there are quite a few words that were considered new and unfamiliar, such as self-mutilation, dismemberment, and non-fatal that obstructed comprehension even though a translated text was already provided. However, this problem was eased by including unfamiliar words in a list with Thai meanings and providing grammar usage such as negative prefixes (e.g., dis-, non-, and un-) to help the participants make a better guess at the meanings of new words. The exercises in 3.1, 3.2, 3.4, 5.2 and a test in Module 5 were revised by simplifying stems, options, and statements using more common and familiar words such as replacing the word “strangle” with “hang” or “harm” and using less complex sentences such as using the active instead of passive voice.

These revisions were carried out to ensure the E1/E2 scores exceeded 80% for all modules in the field study testing step with a much larger number of participants.

4.2.3 Results of the Field Study Testing

The last tryout or the field study testing step was planned to be conducted with 30 registered psychiatric nurses who were not the same participants as in the previous two tryouts. They gave verbal shift reports on patients with paranoid schizophrenia in English before and after they had completed all exercises and tests in the EPN program as an oral pretest and posttest. They also provided information and feedback for the questionnaire and the interview. However, three participants had to be excluded because they were unable to complete every step in the data collection process. The E1/E2 scores of each module are presented in Table 4.5.

Table 4.5: E1/E2 Scores of the Field Study Testing

Field Study Testing		
E-Learning Modules	**E1 Score (%)**	**E2 Score (%)**
Module 1: Schizophrenia	83.06	85.03
Module 2: Paranoid Schizophrenia	81.21	85.49
Module 3: Violence and Escape	80.31	83.95
Module 4: Depression and Suicide Risk	84.69	85.65
Module 5: Information Transfer	80.74	80.25
Module 1 – Module 5	**82.14**	**84.07**

According to Table 4.5, the E1/E2 scores in every module were above the 80/80 standard criterion. The participants' E1/E2 scores were 83.06/85.03 in Module 1, 81.21/85.49 in Module 2, 80.31/83.95 in Module 3, 84.69/85.65 in Module 4, and 80.74/80.25 in Module 5. The E1/E2 cumulative scores were 82.14/84.07.

After the EPN program was extensively revised in the individual testing and the small group testing steps, the E1/E2 scores which represent the efficiency of the process and product in every module eventually reached the targeted criteria of 80/80. However,

the EPN program was rechecked by the researcher and the experts in the field of English Language Teaching and in the field of Psychiatric and Mental Health Nursing for content accuracy and the expert in the field of Instructional Systems Technology for usability and readability. To avoid major mistakes, the researcher and the experts thoroughly examined the EPN program for possible typos, grammatical errors, broken media files, dead links, and other details, such as inappropriate background colors, fonts, and inaccurate navigation before launching the EPN program for the experiment in the trial run.

4.2.4 Results of the Experiment

The trial run was conducted with thirty registered psychiatric nurses who were the subjects of the study. The criteria in assigning the subjects and in collecting the data were identical to the three tryout steps. First, the subjects gave shift reports in English as oral pretests for two raters and provided the researcher with their e-mail addresses. Second, they received an e-mail containing details of how to access the EPN program through www.coursesites.com with their assigned username and password for an instant log in. Third, they studied independently and completed the exercises and tests in all five modules within a four week period. Finally, they responded to the questionnaire and answered the semi-structured interview questions. The results of the E1/E2 scores in the trial run phase are shown in Table 4.6.

Table 4.6: E1/E2 Scores of the Experiment

The Experiment		
E-Learning Modules	**E1 Score (%)**	**E2 Score (%)**
Module 1: Schizophrenia	85.55	86.94
Module 2: Paranoid Schizophrenia	85.64	88.06
Module 3: Violence and Escape	83.17	83.89
Module 4: Depression and Suicide Risk	85.19	87.22
Module 5: Information Transfer	83.67	81.67
Module 1 – Module 5	**84.72**	**85.56**

As Table 4.6 illustrates, the E1/E2 efficiency index in every module successfully met the 80/80 standard criterion. The detailed scores were 85.55/86.94 in Module 1, 85.64/88.06 in Module 2, 83.17/83.89 in Module 3, 85.19/87.22 in Module 4, and 83.67/81.67 in Module 5. The E1/E2 cumulative scores were 84.72/85.56. The results were positive because considerable revisions were properly and continuously carried out in the three steps during the tryout phase. Hence, it can be reasonably conclude that this e-Learning program was efficient based on the 80/80 standard criterion.

In conclusion, the EPN program was successfully developed, implemented, and improved to meet the targeted 80/80 standard criterion of the E1/E2 efficiency index as a result of the many revisions which were made in the areas of content, media, assessment, and language support during the three steps of the tryout phrase. Hence, the scores of 84.72/85.56 acquired from the trial run phrase signify that the EPN program was efficient based on the 80/80 standard criterion. The results of the second research question on the learning achievement are reported in the following section.

4.3 Results of the Learning Achievement in Oral Presentation Skills

Thirty registered psychiatric nurses were asked to give verbal shift reports on patients with schizophrenia as a pretest and a posttest to determine their learning achievement before and after learning through the EPN program to find out to what extent they had improved their oral presentation skills. Each subject took three to five minutes to give a brief shift summary and a short shift report in English. Two raters who were a nurse educator from Boromarajonani Nursing College, Praputthabat and a head nurse at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital were trained to

use an analytic scoring rubric as a tool to evaluate the learning achievement of each subject. The analytic scoring rubric comprised three categories: content accuracy, use of language, and pronunciation. Detailed descriptions for each category are listed according to four levels of performance (See Appendix C).

The oral pretest and posttest assessments in the experiment were not conducted face-to-face due to the difficulty of having the two raters attend interviews at the hospital many times. Therefore, a voice recorder was used for both the oral pretest and posttest assessments. The subjects, nurses who were going off duty, were recorded as they gave shift reports to the oncoming nurses at their wards. However, to protect the rights of the patients whose names were used in the recorded files, the researcher was responsible for discreetly managing the files to avoid unnecessary ethical problems. Consequently, only the professional raters who were nurses were designated to listen to the recorded files and provide the scores according to the rubric. Two raters were given sixty recorded files for the pretest and the posttest assessments to rate the subjects' performance in three categories. The details of the scores rated individually by the two raters are in Appendix G.

Then, two sets of the oral pretest scores and another two sets of the posttest scores were statistically compared to determine whether or not they revealed a tendency to vary from one another. A Pearson product-moment correlation coefficient was used to investigate the inter-rater reliability between the scores obtained from the two raters. The results of the mean and the inter-rater reliability for the pretest scores are presented in Table 4.7 and Table 4.8 and for the posttest scores in Table 4.7 and Table 4.8.

Table 4.7: Results of the Mean Scores of the Pretest from Two Raters

	Mean*	Std. Deviation	N
Pretest scores from Rater A	6.10	1.029	30
Pretest scores from Rater B	6.30	1.088	30

* The maximum score possible is 12.

Out of the maximum score of 12 in 3 categories of the analytic scoring rubric, the pretest mean scores for 30 subjects received from Rater A and Rater B are shown in Table 4.7 were 6.10 and 6.30. For the measurement of correlation, the data reveal a positive correlation between the pretest scores from Rater A and Rater B as r = 0.897. Simply put, the Pearson correlation at 0.897 shows that there is a strong, positive correlation between the two sets of pretest scores. It can be concluded from this that the two different raters agreed in their assessment decisions when it came to rating the learners' oral pretest performances using the scoring rubric.

Table 4.8: Results of the Mean Scores of the Posttest from Two Raters

	Mean*	Std. Deviation	N
Posttest scores from Rater A	8.13	1.432	30
Posttest scores from Rater B	8.37	1.377	30

* The maximum score possible is 12.

Table 4.8 shows the mean scores slightly increased from 6.10 and 6.30 for the pretest to 8.10 and 8.37 for the post test. A Pearson product-moment correlation coefficient was computed to assess the relationship between the posttest scores rated by Rater A and Rater B and the correlation between the two raters was found to be r = 0.933. Briefly, there was a very strong, positive correlation between the two set of posttest scores rated by the two raters who appeared to closely agree in their assessments.

In summary, the scores for the oral pretest and posttest assessments were statistically proven to be positively acceptable in terms of their inter-rater reliability. Thus, the scores were calculated to determine the subjects' learning achievements in oral presentation skills in English before and after learning through the EPN program. The results of the pretest and posttest scores are shown in Table 4.9.

Table 4.9: Results of Learners' Learning Achievement in Oral Presentation Skills

Learners	Pretest	Posttest	Differences
1.	8	12	4
2.	6	10	4
3.	6	7	1
4.	6	8	2
5.	6	7	1
6.	7	10	3
7.	5	8	3
8.	6	8	2
9.	7	8	1
10.	5	8	3
11.	7	8	1
12.	7	10	3
13.	7	8	1
14.	5	6	1
15.	5	6	1
16.	6	8	2
17.	7	9	2
18.	5	8	3
19.	7	8	1
20.	4	6	2
21.	6	8	2
22.	5	8	3
23.	5	6	1
24.	5	7	2
25.	6	7	1
26.	7	10	3
27.	7	9	2
28.	5	7	2
29.	6	8	2
30.	8	10	2
($\bar{x}$)	**6.07**	**8.10**	**2.03**
S.D.	**1.015**	**1.423**	**0.928**
N = 30			**Sig = .000**

Data for the scores of the pretest and posttest, differences**,** mean, standard deviation, and Sig. value are shown in Table 4.9. The mean scores ($\bar{x}$) of the pretest and posttest at 6.07 and 8.10 suggest that after learning through the EPN program the subjects' learning achievement in oral presentation skills improved. The maximum score gained after learning though the EPN program was four and the minimum increase one. Detailed data including the mean difference and the standard deviation of the pretest and the posttest, t-value, and p-value are summarized in Table 4.10.

Table 4.10: Results of a Comparison of Pretest and Posttest Scores

	Dependent T-Test							
	Mean	**S.D.**	**Mean Difference**	**95% Confidence Interval of the Difference**		**t**	**df**	**Sig. (2-tailed)**
				Lower	**Upper**			
Pretest	**6.07**	**1.015**	**-2.03**	**-2.380**	**-1.687**	**-12.003**	**29**	**.000**
Posttest	**8.10**	**1.423**						

[p < .01]

As can be seen in Table 4.10, the data suggest that there is a significant difference in the pretest score ($\bar{x}$ = 6.07, SD = 1.015) and the posttest score ($\bar{x}$ = 8.10, SD = 1.423) conditions; t (29) = 12.003, p =.000. Based on the results obtained from a paired-samples t-test conducted to compare the pretest score and the posttest score, it can be concluded that the subjects gained significantly higher scores after learning through the EPN program. The following section reports the findings of the last research question about the attitudes toward learning through the e-Learning program.

4.4 Results of the Attitudes toward the EPN Program

Two instruments, the questionnaire and the semi-structured interview, were used to collect the data pertaining to the registered psychiatric nurses' attitudes toward

the EPN program. The following sections describe the results obtained from the questionnaire and from the semi-structured interview.

4.4.1 Results from the Questionnaire

This questionnaire consisted of twenty-four items which were divided into three parts. The first part contained five questions pertaining to personal information such as gender, age, and level of education. The second and third parts comprised thirteen and six opinion statements that were measured according to a five-point Likert-scale response. They were statements regarding attitudes toward the EPN program and attitudes toward learning through the EPN program respectively. The questionnaire was distributed to 30 respondents. The results of the questionnaire presented in basic descriptive statistics were found by calculating an arithmetic mean. The results of the first part are shown in Table 4.11, the second part in Table 4.14, and the third part in Table 4.16.

The first part of the questionnaire contained five questions with fixed responses about the respondents' personal information. These questions concerning gender, age, level of education, the number of years of work experience, and the number of times the respondents had given shift reports in English prior to studying on the EPN program. The results of this part are shown in Table 4.11.

Table 4.11: Results of Part 1 – Personal Information

Personal Information	Frequency (N = 30)	Percentage (100%)
1. Gender		
- Male	5	16.7%
- Female	25	83.3%
2. Age		
- Less than 30	7	23.3%
- 30 – 39	6	20%
- 40 – 49	11	36.7%
- Over 50	6	20%
3. Level of Education		
- Bachelor's degree	19	63.3%
- Master's degree	11	36.7%
- Other		
4. Years of Work experience		
- Less than 5 years	9	30%
- 5 – 10 years	2	6.7%
- Over 10 years	19	63.3%
5. The Number of Shift Reports given		
- Less than 5	17	56.7%
- 5 – 10	9	30%
- Over 10	4	13.3%

Thirty respondents, five males and twenty-five females, were of four different age ranges. Seven respondents (23.3%) were below 30 years old, six (20%) were between 30 and 39, eleven (36.7%) were between 40 and 49, and six (20%) were over 50. Nineteen respondents (63.3%) held a Bachelor's degree and eleven (36.7%) had a Master's degree. The majority of the respondents (63.3% or 19) had over ten years of work experience as registered psychiatric nurses, nine (30%) had less than five years' experience, and only two (6.7%) had five to ten years of work experience. With regard to the number of shift reports given in English, seventeen respondents (56.7%) had given shift reports in English less than five times prior to learning through the EPN program, nine (30%) about five to ten times, and only four (13.3%) over ten times. It should be noted that although these variables were different, they did not affect the results.

The second part of the questionnaire comprised thirteen opinion statements according to a five-point Likert scale measuring the respondents' levels of agreement toward the EPN program. The Likert-scaled responses were given values as 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree. The criteria for interpreting the mean score of each statement, the criteria for the overall opinion statements, and the results in Part 3 are illustrated in Table 4.12, Table 4.13, and Table 4.14 respectively.

Table 4.12: Criteria for Interpreting the Five-Point Likert Scales for Individual Items

Ranges	Statements
4.50 – 5.00	Strongly agree
3.50 – 4.49	Agree
2.50 – 3.49	Undecided
1.50 – 2.49	Disagree
1.00 – 1.49	Strongly disagree

Table 4.13: Criteria for Interpreting Five-Point Likert Scales for Part 2

Means	Interpretation
4.50 – 5.00	The EPN program is very appropriate.
3.50 – 4.49	The EPN program is appropriate.
2.50 – 3.49	The EPN program is neutral.
1.50 – 2.49	The EPN program is not appropriate.
1.00 – 1.49	The EPN program is not at all appropriate.

Table 4.14: Results Part 2 - Attitudes toward EPN Program

Statements	$\bar{x}$	S.D.	Interpretation
1. The learning objectives in each module are clear.	4.27	0.58	Agreed
2. The content is in line with the objectives.	4.13	0.43	Agreed
3. The amount of the content in each program is appropriate.	4.13	0.35	Agreed
4. The content is appropriate in terms of difficulty level.	3.97	0.49	Agreed
5. The content is accurate.	4.10	0.40	Agreed
6. The tests are in line with the content and the objectives.	4.30	0.47	Agreed
7. There are a variety of test formats.	4.40	0.56	Agreed
8. The number of test items is appropriate.	4.17	0.59	Agreed
9. The tests are appropriate in terms of level of difficulty.	4.13	0.57	Agreed
10. The log-in is not complicated.	4.07	0.64	Agreed
11. The e-Learning is user-friendly and easy to navigate.	3.90	0.61	Agreed
12. The type, size and color of fonts are clear and readable.	4.20	0.48	Agreed
13. The quality of text, graphic, and audio is appropriate.	4.20	0.55	Agreed
Total	**4.15**	**0.52**	**Appropriate**

There were thirteen opinion statements in Part 2 of the questionnaire that asked the respondents about the content, assessment, and outlook of the EPN program. The first five statements involved the content in terms of its clarity and consistency with the learning objectives; appropriateness of amount and difficulty level, and accuracy. They agreed that *the learning objectives in each module were clear*; *the content was in line with the objectives*; *the amount of the content was appropriate*; *the level of difficulty of the content was appropriate*; and *the content was accurate*. Even though these

statements about the content were all rated as appropriate, the mean score ($\bar{x}$) of item 4, *the appropriateness of content for its difficulty level*, was the lowest at 3.97 despite the mean scores of other statements being over 4.10.

The next four items relating to the assessment of the EPN program were statements 6 – 9. They concerned the assessment regarding its connection with the content and objectives, variety of question types, and the suitability of the number of items and difficulty level. All respondents agreed *that the tests were consistent with the content and the objectives ($\bar{x}$ = 4.30), were of a variety of types ($\bar{x}$ = 4.40)*, and *were appropriate for the number of items and difficulty level ($\bar{x}$ = 4.17 and 4.13).* The mean scores of these four statements were positively interpreted as appropriate.

The last four statements (items 10 – 13) concerned the general appearance of the EPN program, such as the login, navigation, visual and audio media. The mean scores for all statements in this part were rated as appropriate. The respondents agreed that *the login was not complicated ($\bar{x}$ = 4.07)* and the EPN program was user-friendly *($\bar{x}$ = 3.90)*, readable *($\bar{x}$ = 4.20)*, and appropriate in terms of visual and audio media *($\bar{x}$ = 4.20)*. Even though all statements were above 3.68 and rated as very appropriate, the mean score ($\bar{x}$) of item 15, *the EPN program is user-friendly and easy to navigate*, was the lowest at 3.90.

To conclude Part 2 of the questionnaire, the overall mean score ($\bar{x}$) from Table 4.16 about the results of the attitudes toward the EPN program was at 4.15, signifying that all respondents agreed the EPN program was appropriate.

The last part of the questionnaire consisted of six statements concerning the nurses' attitudes toward learning through the EPN program. A five-point Likert-scale of responses was used to measure levels of agreement. The format of the scales are 1 =

strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree. The criteria for interpreting the mean score of each statement in Part 3 were the same as in Part 2 (See Table 4.14). The criteria for the overall statements and the results about the attitudes toward learning through the EPN program are illustrated in Table 4.15 and Table 4.16.

Table 4.15: Criteria for Interpreting the Five-Point Likert Scale for Part 3

Means	Interpretation
4.50 – 5.00	RPNs have very good attitudes toward learning through the EPN program.
3.50 – 4.49	RPNs have good attitudes toward learning through the EPN program.
2.50 – 3.49	RPNs have neutral attitudes toward learning through the EPN program.
1.50 – 2.49	RPNs have bad attitudes toward learning through the EPN program.
1.00 – 1.49	RPNs have very bad attitudes toward learning through the EPN program.

Table 4.16: Results of Part 3 - Attitudes toward Learning through the EPN Program

Statements	$\bar{x}$	S.D.	Interpretation
1 The content in the EPN program fits your needs as a RPN.	4.57	0.50	Strongly agree
2 You have gained more vocabulary and phrases that are useful for giving shift reports on patients with schizophrenia.	4.63	0.49	Strongly agree
3 The audio files help improve your pronunciation.	4.33	0.76	Agree
4 The section 'Grammar Focus' helps you form better sentences for giving verbal shift reports on patients with schizophrenia.	4.53	0.57	Strongly agree
5 The EPN program helps you give verbal shift reports more accurately.	4.47	0.57	Agree
6 The EPN program increases your confidence in giving shift reports in English.	4.50	0.57	Strongly agree
Total	**4.51**	**0.58**	**Very good attitude**

There were four statements rated as 'strongly agree' and two as 'agree' according to the data presented in Table 4.16 regarding attitudes toward learning through the EPN program. First, the respondents strongly agreed that the EPN program on giving nursing shift reports on patients with schizophrenia in English fit their needs ($\bar{x}$ = 4.57). Next, they also strongly agreed that they gained more knowledge and understanding of vocabulary ($\bar{x}$ = 4.63) and grammar usage ($\bar{x}$ = 4.53). Last, they strongly agreed that they became more confident giving shift reports on patients with schizophrenia in English ($\bar{x}$ = 4.50). The respondents agreed that the audio files helped them pronounce words more correctly ($\bar{x}$ = 4.33) and the EPN program helped them give shift reports more accurately ($\bar{x}$ = 4.47). The overall mean score of the last part of the questionnaire was calculated at 4.51 which indicates that all respondents had very good attitudes toward learning through the EPN program.

In conclusion, the questionnaire yielded a 100% response rate (N = 30) and was found reliable at 0.86. There were 24 items in the questionnaire and it comprised three parts regarding demographic information, attitudes toward the EPN program, and attitudes toward learning through the EPN program. Briefly, the majority of the respondents were female (83.3%). The respondents' ages varied from below 30 to over 50, but most of them were between 40 and49 years old (36.7%), had a Bachelor's degree (63.3%) and had over 10 years of work experience as psychiatric nurses (63.3%). They found the EPN program to be very appropriate ($\bar{x}$ = 4.15) and they had a very good attitude toward learning through the EPN program ($\bar{x}$ = 4.51).

The attitudes toward the EPN program and toward learning through the EPN program gathered from the questionnaire were crosschecked against the information from the interview to yield more balanced and accurate views of the subjects. The results from the interview are reported in the next section.

4.4.2 Results from the Interview

The semi-structured interview was carried out with 12 RPNs who work at five different inpatient wards at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital. Seven questions were asked to elicit additional attitudes and suggestions toward using the EPN program. The interview was conducted face-to-face in Thai to reduce any ambiguity or misinterpretation. It took approximately ten minutes for each RPN to answer the questions (See complete questions and responses in Appendix H). The results of the interview question were divided into benefits, challenges, and suggestions as follows:

4.4.2.1 Benefits

Despite this program being their first online experience, all of the RPNs revealed positive attitudes toward learning through the EPN program. According to their feedback, learning through the EPN module was meaningful due to three main reasons: the applicability of the materials, the relevance of the materials to their work, and the usefulness of the program as a guide or a source on the improvement of their English skills.

First, since the main goal of learning was to enhance their oral presentation skills on giving shift reports in English, the RPNs appreciated that the program offered lists of vocabulary and examples of sentences that they could immediately adapt and use for making their shift reports. They also had the option of learning grammar rules that were related to the topics in each module if they preferred to form their own sentences to adopt the examples they found on the sections of content, vocabulary, and grammar. Their comments were:

> *"Yes. I like the vocabulary and grammar sections because they are what I want to learn. I want to learn new vocabulary to use in my shift handover and I want sentences I can use immediately." (RPN06)*
>
> *"Yes. I like sentence examples in grammar section. I copy and use them for my reports." (RPN09)*
>
> *"Yes. I like content, vocabulary, and grammar in the program because when I give shift reports, I log on to search for vocabulary and sentences to use." (RPN10)*

Second, they found learning through the EPN program meaningful because they believed the contents were relevant to their field of expertise. In addition, they could

independently manage their own learning in an online environment because the similarity between the content in both languages allowed them to link what they already knew well about paranoid schizophrenia in Thai with English without much effort. The comments were:

"Yes. I like the content and vocabulary sections. The contents about symptoms, precautions, and shift forms are very useful. I know and use most of the words." (RPN04)

"Yes. I enjoy learning the content. It is interesting and practical because we have cared for many schizophrenics so I think I can understand most of the content in English." (RPN12)

Last, they perceived the EPN program as a guide and a source for improving their English skills on shift reporting. They considered the EPN program a learning source where they could learn and improve their English for their work and for the opening of the Asean Economic Community (AEC) in 2015. The comments were:

"Yes, it is a useful learning tool. I think it will help improve my English for the upcoming AEC." (RPN02)

"Yes. The program is very useful for improving my English. It can be a guide to help me learn to use correct vocabulary and grammar to prepare myself for the upcoming AEC." (RPN10)

"Yes, it is useful. The content and some examples can be applied in giving shift reports and I can use them as a guide." (RPN11)

4.4.2.2 Challenges

There were two major challenges when it came to learning independently through the EPN program: limited vocabulary knowledge and a lack of familiarity with the program.

First, they had some difficulty comprehending topics in each module due to their limited knowledge of English vocabulary. Even though they reported that they could guess the overall content, they still struggled because they were not certain if their comprehension was complete. They added that the content in English was quite challenging because there were several unknown words that hampered their overall comprehension. So, they had to resort to Thai translations that were optionally provided in all modules during learning. The comments were as follows:

> *"I downloaded and printed out a complete list of vocabulary especially for Module 3 because there are too many new words. I think Module 3 is the most difficult, but it is not too difficult because I can guess what the content is about sometimes and I can check if I am right by reading it again in Thai." (RPN07)*
>
> *"I am familiar with those topics, but they are in English so I don't think they are that easy. I have to depend on Thai translations." (RPN8)*
>
> *"I think most modules are difficult because I don't know the vocabulary. I read and listen to texts, but I could barely recognize those words. If I knew the vocabulary, it would be easier." (RPN9)*

Second, even though technical problems regarding computer/technology issues were not highlighted, according to the responses from the interviews, navigating through the program entirely by themselves after receiving a session of face-to-face training was time-consuming and difficult. There was a claim that the "How to" section

was probably overlooked by older learners. However, the age and computer/IT skills were not found to be statistically significant in this study. They acknowledged that learning how to use and becoming acquainted with the program took time. The comments were:

"I think registration requires too many steps. I have to click too many links and it is frustrating because everything is in English. For me and other nurses of my age, it takes a lot of time to really know how to use the program. I don't think we read the "How to" section. I didn't. I just wanted to go straight to the lessons." (RPN09)

"I have never learned through an e-Learning program, but I don't think it is too difficult. It just takes time to get familiar with the program." (RPN02)

4.4.2.3 Suggestions

The suggestions from the RPNs for future improvements of the program were divided into three aspects: content, media, and program training.

First, on improving content and assessment, the recommendations were centered on the ease of comprehension. As some parts of the content and assessment were demanding, it was suggested that they be made shorter in length and simpler in use of language. Also, the contents were too specific considering that shift reports were also given on patients with other mental illnesses; it was advised to expand the content to other topics within the field of mental health and psychiatry.

"Make the content shorter and make the questions in the exercises and tests easier." (RPN02)

"Develop another course on dementia or alcohol abuse." (RPN01)

"Maybe add more examples because each ward is different. In my ward, most patients are diagnosed with alcohol abuse and the examples are mostly about paranoid schizophrenia." (RPN12)

Second, regarding the aspect of media, they commented that the audio files need to be adjusted for speed and length. All audio files in the EPN program were created by using a sound editing program. The selected narrative voice was that of an American female with a speed of minus 1. The length of each audio ranged from one – five minutes depending on the contents of the topics. Even though scripts were provided, these issues were still raised possibly because the RPNs had limited vocabulary knowledge or they might not be familiar with the pronunciation of the words they listened to. The comments were:

"I think the audio is fast, I cannot follow." (RPN07)

"The audio is too fast and some clips are too long." (RPN08)

The final suggestion was made about the training on how to use the program. The RPNs had very limited to no e-Learning experience so they needed to be trained or guided on how to use the EPN program. Even though they received training to navigate the program prior to learning independently, only one training session may not have been sufficient. The example of the comment was:

"For me, e-Learning is very new so I want to be trained and retrained on how to learn through the e-Learning program." (RPN11)

Twelve registered psychiatric nurses working in five different inpatient wards were selected to answer seven semi-structured interview questions to cross-check the information obtained from the questionnaire regarding attitudes toward learning through the EPN program to enhance oral presentation skills on shift reports. The

interviewees confirmed that they enjoyed learning independently in an online environment although they had never learned through e-Learning before. They explained that they learned content, vocabulary, grammar, and sentence examples that were useful for giving shift reports on patients with paranoid schizophrenia in English. They added that the learning contents in the EPN program were difficult because they had limited knowledge of English vocabulary. However, the Thai translations eased their difficulties with most parts. The audio files were helpful for pronunciation though they suggested that videos should be added so that they would have a more personal relationship with the tutor/instructor.

4.5 Summary

The purposes of this study were to develop an online model: the modified ISD model for designing and constructing the English for Psychiatric Nurses (EPN) program to help Thai registered psychiatric nurses enhance their oral presentation skills and to explore their attitudes toward learning through the EPN program in a fully online environment. After the researcher designed and constructed the EPN program by following the phases and steps in the modified ISD model, the program was launched in the tryout phase and the trial run phase. The program was implemented, examined, and revised for efficiency in the three tryout steps to meet the 80/80 standard criterion before it was used with the thirty registered psychiatric nurses (RPNs) who participated in the experiment. They completed four steps in this study. First, they took an oral pretest. Next, they used the EPN program and completed five modules within a 30 day period. Then, they took an oral pretest. Last, they completed the questionnaire and the

interview. Finally, twelve RPNs were randomly selected to answer seven questions in a face-to-face semi-structured interview.

The scores from exercises (E1) and tests (E2) in five modules of the EPN program were calculated against the 80/80 standard criterion. The EPN program was efficient only when 80 percent of the exercises and tests were achieved. Second, two sets of oral pretest and oral posttest scores given by two raters were calculated using a statistical method for obtaining the mean scores and the p-value. The EPN program enhanced the RPNs' oral performance when the posttest mean score was significantly higher than that of the pretest mean score. Third, the data pertaining to attitudes toward the use of the EPN program were obtained from the questionnaire and the interview. The data from the questionnaire were analyzed using statistics and interpreted according to the mean scores and the established criteria. The data from the interview were analyzed using a method of content analysis.

The results of the current study can be summarized as follows:

1. The modified ISD model that the researcher developed to use as a framework for designing and constructing the EPN program consisted of six major phases and twelve steps.
2. The EPN program was effective based on the 80/80 standard criterion. The scores from the process (E1) and the product (E2) in five modules were 84.72/85.56.
3. The RPNs' oral performance scores between the pretest and the posttest were statistically significant different at $p<.00$. Thus, the EPN program improved the RPNs' oral performance in giving shift reports on patients with schizophrenia in English.

4. The results obtained from the questionnaire showed that the RPNs believed the EPN program was appropriate ($\bar{x}$ = 4.15) and they had very positive attitudes ($\bar{x}$ = 4.51) towards learning though the EPN program.

CHAPTER 5

CONCLUSION, DISCUSSIONS, AND RECOMMENDATIONS

In this chapter, the research results from the previous chapter are summarized, discussed, and concluded. The discussions are organized in four sections: (1) the development of the modified ISD model; (2) the efficiency of the EPN program; (3) the learning achievement on oral performance; and (4) the attitudes toward learning through the EPN program. The limitations of the study, the implications for online learning, and the recommendations for future studies are also presented.

5.1 Conclusion

The purposes of this study were to develop an online model: the modified ISD model for designing and constructing the English for Psychiatric Nurses (EPN) program to help Thai registered psychiatric nurses enhance their oral presentation skills and to explore their attitudes toward learning through the EPN program in a fully online environment. After the researcher designed and constructed the EPN program by following the phases and steps in the modified ISD model, the program was launched in the tryout phase and the trial run phase. The program was implemented, examined, and revised for efficiency in the three tryout steps to meet the 80/80 standard criterion before it was used with the thirty registered psychiatric nurses (RPNs) who participated in the experiment. They completed four steps in this study. First, they took an oral

pretest. Next, they used the EPN program and completed five modules within a 30 day period. Then, they took an oral pretest. Last, they completed the questionnaire and the interview. Finally, twelve RPNs were randomly selected to answer seven questions in a face-to-face semi-structured interview.

The scores from exercises (E1) and tests (E2) in five modules of the EPN program were calculated against the 80/80 standard criterion. The EPN program was efficient only when 80 percent of the exercises and tests were achieved. Second, two sets of oral pretest and oral posttest scores given by two raters were calculated using a statistical method for obtaining the mean scores and the p-value. The EPN program enhanced the RPNs' oral performance when the posttest mean score was significantly higher than that of the pretest mean score. Third, the data pertaining to attitudes toward the use of the EPN program were obtained from the questionnaire and the interview. The data from the questionnaire were analyzed using statistics and interpreted according to the mean scores and the established criteria. The data from the interview were analyzed using a method of content analysis.

The results of the current study can be summarized as follows:

1. The modified ISD model that the researcher developed to use as a framework for designing and constructing the EPN program consisted of six major phases and twelve steps.
2. The EPN program was effective based on the 80/80 standard criterion. The scores from the process (E1) and the product (E2) in five modules were 84.72/85.56.
3. The RPNs' oral performance scores between the pretest and the posttest were statistically significant different at $p<.00$. Thus, the EPN program improved

the RPNs' oral performance in giving shift reports on patients with schizophrenia in English.

4. The results obtained from the questionnaire showed that the RPNs believed the EPN program was appropriate ($\bar{x}$ = 4.15) and they had very positive attitudes ($\bar{x}$ = 4.51) towards learning though the EPN program.

5.2 Discussions of Findings

The results of the current study reveal that the EPN program designed and constructed by following the phases and steps in the modified ISD model developed by the researcher was efficient based on the 80/80 standard criterion. The EPN program helped improve the RPNs' oral presentation skills in giving shift reports and promoted positive attitudes toward online learning. The discussions of the development of the modified ISD model, the efficiency of the EPN program, the improvement of learning achievement in oral presentation skills, and the satisfaction toward learning through the EPN program are presented in the following sections.

5.2.1 Discussions on the Development of the Modified ISD Model

The modified ISD model was carefully developed by the researcher to be used as a framework for designing and constructing the English for Psychiatric Nurses (EPN) program for registered psychiatric nurses (RPNs). The modified ISD model was to use as a guide to create the EPN program for the RPNs who had heavy workload and irregular work schedule but wanted to learn how to give verbal shift reports on patients with paranoid schizophrenia in English within a fully-online environment. The process in developing the modified ISD model was carefully undertaken as the researcher studied related principles and theories of learning and the models of instructional

systems designs prior to developing the modified ISD model. The principles and theories involves were Andragogy, constructivism, Self-Directed Learning, Situated Learning, and three models of the Instructional Systems Design: ADDIE model, Dick and Carey model, and the SREO Plan.

Throughout the process in developing the modified ISD model, the researcher consulted with the expert and revised the phases and steps of the model according to the received feedback. The complete modified ISD model consisted of six major phases and twelve steps. The phases included problem identification and needs analysis, determination of goals and objectives, selection of contents, development of e-Learning materials and learning activities, implementation/revision, and assessment and evaluation. The steps include obtaining and analyzing data, identifying and setting goals and objectives, considering the sources, selecting and sequencing the contents, choosing a learning platform, a teaching strategy, and an evaluation strategy, launching the program in the tryout and trial run phases, and assessing and evaluating learners.

These phases and steps considerably helped the researcher design and construct the EPN program which enhanced oral presentation skills of the RPNs on giving shift reports on patients with paranoid schizophrenia. The results of the efficiency of the EPN program proved that the phases and steps in the modified ISD model were suitable for designing and constructing the program to be used in an online environment.

5.2.2 Discussions on the Efficiency of the EPN Program

The EPN program was efficient based on the 80/80 standard criterion. The efficiency of the EPN program was due to the processes involved in the modified ISD model adopted in this study.

The phases and steps in the modified ISD model are helpful in developing an efficient EPN module. The problem identification and the need assessment analysis are the first two important phases that enable the researcher to find out the needs of the learners. In designing and developing an e-Learning to be effectively implemented, it is necessary to acquire as much information as possible about the learners. For instance, instructors/designers should know if learners have adequate computer/IT skills because the lack of skills could impede learning and negatively affect their e-Learning experience (Attack, 2003; Gerkin, 2009; Karaman, 2011). Besides, if the majority of learners are novices in technology, then choosing a highly complex platform will be problematic.

However, the difficulty level plays an important role in the RPNs' learning experience. During the tryouts phase, the E1/E2 scores were lower than the established 80/80 standard criterion. The factors affecting low scores in every module were due to the difficulty level of the vocabulary and the length of the content in general. The feedback given by the participants led to several revisions on the content, media, and assessment. The lack of vocabulary and the content length were two major factors contributed to the failure in achieving the 80/80 criterion. However, after the revisions and modifications were undertaken to ease learning in terms of difficulty level, the scores were soared and the RPNs became more engaged in the module. Hence, EPN module successfully met the targeted 80/80 standard criterion because several revisions were made in areas of content, media, and assessment. Besides, the language support was introduced during the three steps of the tryout phrase to greatly aid in comprehension. In short, the revisions and improvements were undertaken to meet the RPN's needs and their English proficiency levels.

Given that the learning was designed to allow the RPNs to be entirely in charge of their learning, the content in each unit was separated in smaller topics so that the RPNs could learn any topic as needed. The aim was to ease their learning and to enable the RPNs to effectively digest their knowledge in chunks. The EPN program allows the RPNs to spend as much time as they want on learning, reviewing, or practicing. Also, the RPNs were given an opportunity to retake the exercises up to three times in which the highest scores were recorded in grade center. The RPNs could always track their previous attempts and the results of the exercise and test are presented in details. So, all these flexibilities could likely be contributed to the efficiency of RPN module.

The modified ISD model are recommended to use as framework for designing and developing learning materials and activities to meet the needs of adult learners in learning English as a foreign language in a mental health and psychiatric context.

5.2.3 Discussions on the Learning Achievement in Oral Presentation Skills

The RPNs' oral performance was improved after they learned though the EPN program. The improvement of their oral presentation skills in English may be due to the fact that they had a chance to apply what they learned into application almost immediately. The RPNs were encouraged to give verbal shift reports at least once a week at their wards so it is very likely that they had reasons to be actively engage in the module because they had to prepare for the report. The contents in five modules of the EPN program are related to their work. Parts of the module, for example, the contents in Unit 5 – Information Transfer were created based on actual information collected from nursing notes and reports. Authentic learning contents that are relevant to their task (giving shift reports once a week) positively help contribute to transfer of knowledge (Zemke & Zemke, 1996).

The RPNs also learned vocabulary, phases, and grammar from the EPN program and gained sufficient knowledge and understand to apply them into practice. This finding is in line with many studies in nursing field that e-Learning helps improve knowledge and skills (Abdelaziz et al., 2011; Layton, 2007; Liu et al., 2014; Wilkinson et al., 2004; Yu & Yang, 2006). Besides, the downloadable and printable files that contained useful vocabulary and grammar facilitate the RPNs in continuing their learning even when they logged off the module.

5.2.4 Discussions on the Attitudes toward the EPN Program

The RPNs revealed that they found the EPN program very appropriate and they had very good attitudes toward learning through the program. The findings correspond with several studies that e-Learning is perceived as a suitable learning medium for nurses (Atack & Rankin, 2002; Chang et al., 2008; Gerkin et al., 2009; Karaman, 2011; Liu et al., 2014; Wilkinson et al., 2004). Also, the PRNs believed the EPN program was flexible and convenient for independent learning. Many studies find that e-Learning is recognized for high flexibility in time, place, and pace of learning (Blake, 2010; Gerkin et al., 2009; Huang, 2002; Karaman, 2011). For this reason, learning through the EPN program promotes positive attitudes, particularly of the RPNs who have busy work schedules and heavy responsibilities because they can access the module when it is convenient.

Apart from the flexibility and convenience, the RPNs appreciated the benefits of the contents they gained from using the EPN program. They recounted that the contents were connected and relevant to their work and they could use them for giving shift reports. They perceive the usefulness of the course content packed in the EPN program and realized the value of the contents as a reliable resource for improving

knowledge of vocabulary, phrases, and grammar and for increasing their confidence when giving verbal shift reports in English. This was because the researcher notified all the RPNs who participated in the study of the detailed description, the components, features, assessments, and advantages of the course. The RPNs were informed and convinced that the course was specifically designed to help them gain more knowledge of vocabulary, phrases, and grammar that they could apply it in their shift reports. Consequently, the learners expressed positive attitudes toward the course for it allowed them to use what learned into immediate application (Brookfield, 1998).

Blake (2010) asserts that nurses have to balance their learning with life responsibilities, workload, and shift rotations. Nurses regard life and work commitments as priorities over learning, it seems a challenge for instructors/designers to elicit constant engagement from them despite the module has been devotedly designed and developed to fit their needs and contexts. However, e-Learning is by far the most suitable learning medium for nurses who have busy work schedules provided that there is no time limit set for the completion of the course.

Besides an issue of time constraint, inadequate computer/IT skills is also the most cited barrier in e-Learning (Blake, 2010; Gerkin et al., 2009; Yu et al., 2007). Even though learners claim that they have some skills in computer/IT, it does not mean that they can successfully and dependently use the module. It is highly advised that the learners are guided or trained to use the module or else it will affect the learning process and their attitudes (Wilkinson et al., 2004). The barriers to learning for the RPNs were their lack of time to learning and their unfamiliarity with e-Learning. Guiding or training learners to efficiently use the EPN program either through a “How to” link or in person allows learners to become more independent in their learning. However, it is

worth noting that some learners do not read instructions or guides when they try to learn the module. Therefore, instructors/designers could design the module's interface to be simple and easy to navigate so that the positive attitudes are maintained.

5.3 Limitations of the Study

There are three major limitations of this study. First, a control group is excluded due to the limited number of the registered psychiatric nurses working at this hospital and the inconvenience of time and location contributed to traditional classroom-based learning. Therefore, traditional learning and online learning as two different approaches are not compared because the learning outcomes of the RPNs who learn traditionally are not determined. Second, the generalization of the study's outcomes will be very limited due to the resources of only 30 RPNs participated. Lastly, heavy work demand, rotation of shifts, other personal or professional commitments, and the fact that the researcher does not impose on learning schedules may inevitably result in irregular learning and insufficient reviews and practices from the EPN program. However, the RPNs would participate in the learning in the best manner possible.

5.4 Implications of the Study

Instructors are strongly advised to regard adult learners as capable of learning independently and actively given that learning is relevant to their life or work and it fulfills their needs. However, the selected e-Learning platforms or systems should not be too sophisticated for their computer/IT skills because they affect learners' learning process and attitudes toward learning. Adult learners should be involved in the design

and development of e-Learning so that learning is truly based on their needs and they can become engaged in learning more voluntarily and actively. Guides to navigation the module is also necessary and every learner should read them before start learning. This may not be applicable to all groups of learners, but based on this study, do not assume the existence of a “How to” link means all learners can use the module. If learners are in the vicinity, guide or train them in person is also an option.

The design and development of e-Learning programs with specific subject-matter requires considerable resources and time devotion, instructors or course developers should establish that learners as well as the organization need what is being designed and developed by conducting a thorough need assessment analysis. If the e-Learning program is offered for free or paid by the organizations, learners may take learning for granted. Learning in an online environment requires learners to be largely independent in their learning and time management so to encourage learners to constantly engage in learning, supports from the organizations are also needed.

5.5 Recommendations for Future Research

Three recommendations are proposed for future research as follows:

First, although the replication of research could confirm the findings that the registered psychiatric nurses improved their oral presentation skills after using English for Psychiatric Nurses program. However, the current study only included 30 RPNs who were allowed to complete the module within a 30 day period. It is recommended that the future research expand a sample size and extend time allotment so learners can familiarize themselves with EPN module and have longer learning and practice time.

Second, there are only three test formats in low level questions in this study and the researcher did not investigate whether or not the type of test formats affect learners' learning achievements or attitudes. Therefore, researchers may consider conducting a study using different test formats, perhaps using high level questions to increase critical thinking skills and exploring their effects toward adults' learning outcomes.

Third, there are a large number of studies that prove the benefits of e-Learning in positively improving knowledge, skills, and satisfaction, but there are fewer studies conducted on how nurses learn English as a foreign language and how knowledge is transferred from e-Learning into practice. Future research may investigate how or under what condition the knowledge of nurses who learn English in an EFL setting can be transferred into practice.

REFERENCES

Abdelaziz, M., Kamel, S., Karam, O., & Abdelrahman, A. (2011). Evaluation of E-Learning program versus traditional lecture instruction for undergraduate nursing students in a faculty of nursing. *Teaching and Learning in Nursing*, 6(2), 50-58.

Aldrich, C. (2005). *Simulations and the future of learning: An innovative (and perhaps revolutionary) approach to e-Learning*. San Francisco: Pfeiffer.

Alonso, F., López, G., Manrique, D., & Viñes, J. M. (2005). An instructional model for web-based e-Learning education with a blended learning process approach. *British Journal of Educational Technology*, 36(2), 217-235.

Attack, L. (2003). Becoming a Web-based learner: Registered nurses' experiences. *Journal of Advanced Nursing*, 44(3), 297-298.

Attack, L., & Rankin, J. (2002). A descriptive study of registered nurses' experiences with Web-based learning. *Journal of Advanced Nursing*, 40(4), 457-465.

Barbato. A. (1998). *Schizophrenia and Public Health*. World Health Organization: Geneva.

Belcher, J. V. & Vonderhaar, K. J. (2005). Web-delivered research-based nursing staff education for seeking Magnet status. *Journal of Nursing Administration*, 35(9), 382-386.

Berking, P. & Gallagher, S. (2010). *Choosing a Learning Management System*. Advanced Distributed Learning (ADL) Co-Laboratories.

Bloom, B. S., Englehart, M. B., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of Educational Objectives, the classification of educational goals – Handbook I: Cognitive Domain*. New York: McKay.

Bloomfield, J., Roberts, J., & While, A. (2010). The effects of computer-assisted learning versus conventional methods on the acquisition and retention of handwashing theory and skills in pre-qualification nursing students: a randomized controlled trial. *International Journal of Nursing Studies*, 47, 287-294.

Boulton-Lewis, G.M., Wilss, L. & Mutch, S. (1996). Teachers as adult learners: their knowledge of their own learning and implications for teaching. *Higher Education*, 32(1), 89-106.

Brahmawong, C. (1978). *Teaching Media System*, Bangkok: Chulalongkorn University.

Broderick, C. L. (2001). *What is instructional design?* Retrieved from http://www.geocities.com/ok_bcurt/whatisID.html

Brookfield, S. (1998). "On the certainty of public shaming: working with students who just don't get it." In Rust, C. (Ed.) *Improving student learning: Improving students as learners*. Oxford: The Oxford Centre for Staff Learning and Development.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.

Bruner, J. (1996). *The Culture of Education*. London, Harvard University Press

Carver, D. (1983). Some propositions about ESP. *The ESP Journal*, 2, 131-137.

Cega, L., Norman,I., & Mark, I. (2007). Computer-aided vs. tutorial-delivered teaching of exposure therapy for phobia/panic: randomized controlled trail with pre-registration nursing students. *International Journal of Nursing Studies*, 44, 397-405.

Central Intelligence Agency. (2014). Philippines. In The World Factbook. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/geos/rp.html

Central Intelligence Agency. (2014). Singapore. In The World Factbook. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/geos/sn.html

Chang, W. Y., Hsiao Sheen, S. T., Chang, P.-C., & Lee, P. H. (2008). Developing an e-Learning education programme for staff nurses: Processes and outcomes. *Nurse Education Today*, 28(7), 822-828.

Cheng, Y. M. (2013). Exploring the roles of interaction and flow in explaining nurses' e-learning acceptance. *Nurse Education Today*, 33, 73-80.

Clawson, J. G., & Haskins, M. E. (2006). *Teaching management: A field guide for professors, corporate trainers and consultants*. Cambridge, Eng: Cambridge University Press.

Cobb, S. C. (2004). Internet continuing education for health care professionals: an integrative review. *The Journal of Continuing Education in the Health Professions*, 24, 171-180.

Cottrell, S., & Donaldson, J. H. (2013). Exploring the attitudes of registered nurses working in a clinical transfusion environment on the contribution of e-Learning to personal learning and clinical practice: results of a small scale educational research study. *Nurse Education in Practice*, 13(3), 221-227.

Cragg, C.E., Edwards, N., Yue, Z., Xin, S.L., & Hui, Z.D. (2003). Integrating Web-based technology into distance education for nurses in China: computer and Internet access and attitudes. *CIN: Computers, Informatics, Nursing*, 21(5), 265-274.

Cross, J. (2004). An Informal History of eLearning. *On the Horizon*, 12(3), 103-110.

Crystal, D. (1997). *English as a Global Language*. Cambridge: Cambridge University Press.

Daloisio, T., & Firestone, M. (1983). Speaking from experience: a case study in applying adult learning theory in developing managers. *Training and Development Journal*, 73-78.

Darasawang, P., (2007) English Language Teaching and Education in Thailand: A decade of Change. *English in Southeast Asia: Varieties, Literacies and Literatures Newcastle D. Prescott (ed.)* Cambridge Scholars Publishing. 187-204.

Darkenward G., & Merriam, S. B. (1982). *Adult education: Foundations of practice*. New York: Harper and Row.

Davenport, J., & Davenport, J. A. (1985). A chronology and analysis of the andragogy debate. *Adult Educational Quarterly*, 35 (3), 152-159.

Dewey, J. (1938). *Experience and Education*. New York: Collier Books.

Dick, W., Carey. L., & Carey J.O. (2005). *The Systematic Design of Instruction (6th ed)*. New York, NY: Harper Collins Publishers.

Draganov, P. B., Andrade, A. C., Neves, V. R., & Sanna, M. C. (2013). Andragogy in nursing: a literature review. Investigacion & Educacion En Enfermeria, 31(1), 86-94.

Education First. (2013). *EF English Proficiency Index 2013*. Retrieved from E-Learning Portal (2009). *E-Learning glossary*. Retrieved from http://www.e-Learningguru.com/glossary/e.htm.

Ethnologue. (2000). *Language of the World: summary by language size*. Retrieved from http://www.ethnologue.com/statistics/size.

European Commission. (2012). *Europeans and Their Languages*. Retrieved from Special Eurobarometer 386 / Wave EB77.1 Special Eurobarometer: http://ec.europa.eu/public_opinion/archives/ebs/ebs_386_en.pdf

Eurostat News Release. (2013). Two-thirds of working age adults in the EU28 in 2011 state they know a foreign language. [Press release]. Retrieved from http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/3-26092013-AP/EN/3-26092013-AP-EN.PDF

Gerkin, K. L., Taylor, R. H., & Weatherby, F. M. (2009). The perception of learning and satisfaction of nurses in the online environment. *Journal for Nurses in Staff Development,* 25(1), E8-E13.

Graddol, D. (2000). *The future of English*. London: The British Council.

Harp, C., Taylor, S., & Satzinger, J. (1998). Computer Training and Individual Differences: When Method Matters. *Human Resource Development Quarterly*, 9(3), 271-283.

Holton, E. F., Swanson, R. A., & Naquin, S. (2001). Andragogy in practice: clarifying the andragogical model of adult learning. *Performance Improvement Quarterly,*14(1), 118-143.

Hutchinson, T., & Waters, A. (1987). *English for Specific Purposes: A learning-centered approach*. Cambridge: Cambridge University Press.

Huang, H. M. (2002). Toward constructivism for adult learners in online learning environments. *British Journal of Educational Technology*, 33(1), 27-37.

Illeris, K. (2006). *How We Learn: Learning and non-learning in school and beyond (2nd Ed).*NewYork: Routledge.

Jeffries, P. R. (2005). A Frame Work for Designing, Implementing, and Evaluating Simulations Used as Teaching Strategies in Nursing. *Nursing Education Perspectives*, 26(2), 96-103.

Jonassen, D.H., & Grabowski, B.L. (1993). *Handbook of individual differences, learning, and instruction*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Karaman, S. (2011) Nurses' perceptions of online continuing education *BMC Medical Education* 2011, **11**:86

Kirkpatrick, A. (2011). English as a medium of instruction in Asian education (from primary to tertiary): implications for local languages and local scholarship'.*Applied Linguistics Review* (2): 99-119.

Koohang, A., & Harman, K. (2005). Open source: A metaphor for e-Learning. *Informing Science Journal*, 8, 75-86.

Knowles, M. S. (1980). *Modern practice of adult education: From pedagogy to andragogy*. Revised and updated. Chicago: Follett Publishing Company, Association Press.

Knowles, M. S. (1989). *The making of an adult educator: An autobiographical journey*. San Francisco: Jossey-Bass.

Knowles, M. S., Holton, E. F., & Swanson, R.A. (1998). A theory of adult learning: Andragogy. In *The adult learner: The definitive classic in adult education and human resource development (5th Ed)*. Woburn: Butterworth Heinemann.

Knowles, M. S., Holton, E. F., & Swanson, R.A. (2005). *The Adult Learner (6th Ed).* New York: Butterworth-Heinemann.

Knowles, M. S., Holton, E. F., & Swanson, R.A. (2011). *The Adult Learner: The definitive classic in adult education and human resource development (7th Ed).* London: Elsevier.

Knox, A. B. (1986). Helping adults learn: a guide to planning, implementing, and conducting programs. San Francisco: Jossey-Bass.

Lave, J., Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.

Liang, J. C., & Wu, S. H. (2010). Nurses' motivations for web-based learning and the role of psychosocial factors. *Innovations in Education and Teaching International*, 47(1), 68-85.

Liang, J. C., Wu, S. H., & Tsai, C. C. (2011). Nurses' Internet self-efficacy and attitudes toward web-based continuing learning. *Nurse Education Today*, 31(8), 768-773.

Lindeman, E.C. (1988). *The meaning of adult education*. Norman, OK: Oklahoma Research Center for Continuing Professional and Higher Education.

Liu, W.I., Rong, J.R., & Liu, C.Y. (2014). Using evidence-integrated e-learning to enhance case management continuing education for psychiatric nurses: A randomized controlled trial with follow-up. *Nurse Education Today.[Article in Press]*.

McVeigh, H. (2009). Factors influencing he utilization of e-Learning in post-registration nursing student. *Nurse Education Today,* 29, 91-99.

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in Adulthood: A Comprehensive Guide (3rd Ed.).* San Francisco, CA: Jossey-Bass.

Mezirow, J. (1991). *Transformative Dimensions of Adult Learning*. San Francisco, CA: Jossey-Bass.

Ministry of Communication and Technology of New Zealand. (2008). *Digital strategy of the ministry of communication and technology*. Retrieved from www.digitalstrategy.govt.nz/Resources/Glossary-of-Key-Terms

Ministry of Education. (2006). *National Qualifications Framework for Higher Education in Thailand*. Retrieved from http://www.mua.go.th/users/tqfhed/news/FilesNews/FilesNews8/NQF-HEd.pdf

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). E-Learning, online learning, and distance learning environments: Are they the same? *The Internet and Higher Education*, 14, 129-135.

Nelson, E. A. (2003). E-Learning: a practical solution for training and tracking in patient-care settings. *Nursing Administration Quarterly*, 27(1), 29-32.

Nga, N. T. (2008). English- A global language and its implications for students. *VNU Journal of Science, Foreign Languages*, 24, 260-266.

Özden, M. Y., & Aksu, M. (2001).Comparison of hypermedia learning and traditional instruction on knowledge acquisition and retention. *Journal Education Research*, 94, 207-214.

Paladino, Y. & Peres, H. (2007). E-Learning: a comparative study for knowledge apprehension among nurses. *The Revista Latino-American de Enfermagem*, 15(3), 397-403.

Piaget, J. (1930). *The child's conception of physical causality*. Oxford, UK: Harcourt, Brace.

Phipps, S. T. A., Prieto, L. C., & Ndinguri, E. N. (2013). Teaching an old dog new tricks: Investigating how age, ability and self-efficacy influence intentions to learn and learning among participants in adult education. *Academy of Educational Leadership Journal*, 17(1), 13-25

Pratt, D. D. (1993). *Andragogy after twenty-five years. New Directions for Adult and Continuing Education*. San Francisco: Jossy-Bass.

Proulx, J. (2006). Constructivism: A re-equilibration and clarification of the concepts, and some potential implications for teaching and pedagogy. *Radical Pedagogy*, 8(1).

Rager, K. B. (2003). The self-directed learning of women with breast cancer. *Adult Education Quarterly,* 53(4), 227-293.

Reischmann, J. (2003). *Why Andragogy?*. Bamberg University, Germany. Retrieved from http://www.andragogy.net

Romiszowski, A. (2004). How's the E-Learning Baby? Factors Leading to Success or Failure of an Educational Technology Innovation. *Educational Technology*, 44 (1), 5–27.

Rosenberg, M. J. (2001). *E-Learning: Strategies for delivering knowledge in the digital age*. New York: McGraw-Hill.

Ruiz, J. G., Mintzer, M. J., & Leipzig, R. M. (2006). The impact of ELearning in medical education. *Academic medicine: Journal of the Association of American Medical Colleges*, 81(3), 207–212.

Saekow, A. & Samson, D. (2011). E-Learning readiness of Thailand's universities comparing to the USA's cases. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 1(2), 126-131.

Stephenson, J.E., Brown, C., & Griffin, D.K. (2008). Electronic delivery of lectures in the university environment: An empirical comparison of three delivery styles. *Computers & Education*, 50, 640–651

Suppasetseree, S. (2005). *The Development of an Internet-Based Instructional System for Teaching Remedial English to First-Year University Students*. Ph.D. Dissertation Suranaree University of Technology.

Sutherland, P. (1998). The implications for research on approaches to learning for the teaching of adults. *In Adult learning: A reader., ed. Peter Sutherland*. London: Kogan Page.

Suwanarak, K. & Phothongsunan, S. (2008). Attributions of high achieving Thai university students perceiving themselves as failures in English usage. *8th Annual South East Asian Association for Institutional Research (SEAAIR) Conference Proceedings*, 4-6 November 2008, 587- 599.

Swanson, R.A. & Holton, E. F. (2001). *Foundations of human resource development*. San Francisco: Berrett-Koehler.

Tough, A. (1979). *The Adult's Learning Projects*. Toronto: Ontario Institute for Studies in Education.

Tumsaduak, B. & Suppasetseree, S. (2014). A survey of the needs of Thai adult registered psychiatric nurses toward learning English in the workplace within e-Learning environment. *Journal of Teaching and Education,* 3(1), 359-369.

Wagner, N., Hassanein, K., & Head, M. (2008). "Who is responsible for E-Learning Success in Higher Education: A Stakeholders' Analysis". *Journal of Educational Technology and Society*, 11(3), 26-36.

Wilkinson, A., Forbes, A., Bloomfield, J., & Gee, C. F. (2004). An exploration of four web-based open and flexible learning modules in post-registration nurse education. *International Journal of Nursing Studies*, 41(4), 411-424.

Yu, S., Chen, I. J., Yang, K. F., Wang, T. F., & Yen, L. L. (2007). A feasibility study on the adoption of e-Learning for public health nurse continuing education in Taiwan. *Nurse Education Today*, 27, 755-761. .

Yu, S., & Yang, K. F. (2006). Attitudes toward web-based distance learning among public health nurses in Taiwan: a questionnaire. *International Journal of Nursing Studies*, 43, 767-774.

Zemke, R., & Zemke, S. (1996). *Adult learning: What do we know for sure? In The New Training Library: Adult Learning in Your Classroom*. Minneapolis: Lakewood Books. In Chapter 2: Understanding and Motivating the Adult Learner, 71-74.

APPENDIX A

Nursing Shift Report Form A

Date:	……	**Shift:** ……	
Ward:	……		

Total number of patients:			
	Total patients (previous shift)	……	cases
	admission	……	cases
	Transfer	……	cases
	Referral	……	cases
	Discharge	……	cases
	Total patients (current shift)	……	cases

Type of payment:			
	Government	……	cases
	National Health Security Office (NHSO), Thailand	……	cases
	Social Security Office	……	cases
	Other	……	cases

Level of illness:			
	Acute phase I	……	cases
	Acute phase II	……	cases
	Sub-acute	……	cases

Special precaution:			Patients' names
	Suicide	…… cases	……
	Accident	…… cases	……
	Violence	…… cases	……
	Escape	…… cases	……

Special treatment:			Patients' names
	ECT	…… cases	……
	Dental clinic	…… cases	……
	Social worker's clinic	…… cases	……
	Follow-up (Maharaj Hospital)	…… cases	……
	Home visit	…… cases	……

Special diet:	……
Special note:	……

Nursing Shift Report Form B

Case:	.....						
Name:	.....	**Age:**	.....	**Gender:**	.....		
Diagnosis:	.....						
Date of admission:	.....	**New admission:**	.....	**Readmission:**	.....		
Transferred from:	.....						
Primary doctor:	.....						
Primary nurse:	.....						
Consults:	.....						
Precaution:	.....						

Nursing diagnosis & sign and symptom	Treatment and care	Evaluation

Note:	.....
	.....

APPENDIX B

Lesson Plan – English for Registered Psychiatric Nurses

Course Description:

English for Psychiatric Nurses is an online course designed for Thai registered psychiatric nurses who wish to gain or improve knowledge and understanding of vocabulary, phrases, sentences and grammar as well as to develop language skills and confidence in using English to give verbal shift reports on patients with paranoid schizophrenia. In this online course, learners will learn vocabulary, phrases, sentences and grammar and then complete exercises and tests. The pass mark of each exercise/test is not specified, but an overall score is preferably set at 80%. Learners are allowed to take each exercise/test up to three times and the highest score will be recorded.

Course Content:

This course comprises of 5 units as follows:

Unit 1 - Schizophrenia
Unit 2 - Paranoid Schizophrenia
Unit 3 - Escape and Violence
Unit 4 - Depression and Suicide Risk
Unit 5 - Information Transfer

Course Objectives

Learners will be able to use their knowledge and understanding of vocabulary, phrases, sentences, and grammar to give nursing shift reports on patients with paranoid schizophrenia in English more accurately, fluently, and confidently.

Details of Each Unit:

Unit	Unit Overview and Objectives	Assessment
1. Schizophrenia	**Overview:** In this unit, you will learn about schizophrenia, its subtypes, and symptoms. You will review and gain more vocabulary, phrases, and sentences through reading and listening to short excerpts and examples. Also, you can go through useful grammar in the grammar focus sections. After learning, you will complete exercises and a unit test to check your knowledge of schizophrenia, its subtypes, and its symptoms as well as your understanding of learned vocabulary, phrases and sentences	1.1 True/False 1.2 Matching 1.3 Multiple-Choice 1.4 Multiple-Choice

Unit	Unit Overview and Objectives	Assessment
	by completing true or false, matching, and multiple-choice questions. **Content:** 1.1 Definition of schizophrenia 1.2 Schizophrenia subtypes 1.3 Positive symptoms 1.4 Negative symptoms **Objectives:** After completing this unit, you will be able to correctly use the vocabulary, phrases, and sentences to orally describe definitions, subtypes, and symptoms of schizophrenia.	
2 Paranoid Schizophrenia	**Overview:** In this unit, you will learn about paranoid schizophrenia and its most common symptoms: delusions, hallucinations, and thought disorders. You will review and gain more vocabulary, phrases, and sentences through reading and listening to short excerpts and examples. Also, you can go through useful grammar in the grammar focus sections. After learning, you will complete exercises and a unit test to check your knowledge of paranoid schizophrenia, delusions, hallucinations, and thought disorders as well as your understanding of learned vocabulary, phrases and sentences by completing true or false, matching, and multiple-choice questions. **Content:** 2.1 Paranoid schizophrenia 2.2 Delusions 2.3 Hallucinations 2.4 Thought disorders **Objectives:** After completing this unit, you will be able to correctly use the vocabulary, phrases, and sentences to orally describe patients with common paranoid schizophrenic symptoms: delusions, hallucinations, and thought disorders.	2.1 True/False 2.2 Multiple-Choice 2.3 Matching 2.4 Matching

Unit	Unit Overview and Objectives	Assessment
3 Violence and Escape	**Overview:** In this unit, you will learn about patients with escape and violent behaviors regarding definitions, characteristics, interventions, and assessments as well as the use of physical restraints and PRN medications. You will review and gain more vocabulary, phrases, and sentences through reading and listening to short excerpts and examples. Also, you can go through useful	3.1 Multiple-Choice 3.2 Multiple-Choice 3.3 Multiple-Choice 3.4 Multiple-Choice
	grammar in the grammar focus sections. After learning, you will complete exercises and a unit test to check your knowledge of escape, violence, physical restraints, and PRN medications as well as your understanding of learned vocabulary, phrases and sentences by completing true or false, matching, and multiple-choice questions. **Content:** 3.1 Escape 3.2 Violence 3.3 Physical Restraints 3.4 PRN Medications **Objectives:** After completing this unit, you will be able to correctly use the vocabulary, phrases, and sentences to orally describe definitions, characteristics, interventions, and assessments of patients with escaping tendency and violent behaviors as well as to briefly report the use of physical restraints and PRN medications.	
4 Depression and Suicide Risk	**Overview:** In this unit, you will learn about depression and suicide risk in patients with paranoid schizophrenia. The information includes definitions, related terms, signs and symptoms, interventions, and assessments. You will review and gain more vocabulary, phrases, and sentences through reading and listening to short excerpts, examples, and case studies. Also, you can go through useful grammar in the grammar focus sections. After learning, you will complete	4.1 Multiple-Choice 4.2 True/False 4.3 True/False 4.4 True/False

Unit	Unit Overview and Objectives	Assessment
	exercises and a unit test to check your knowledge of depressions, suicide risk, interventions, and assessments as well as your understanding of learned vocabulary, phrases and sentences by completing true or false, matching, and multiple-choice questions. **Content:** 4.1 Depression and Suicide Risk 4.2 Screening Questionnaires 4.3 Nursing Interventions 4.4 Case Studies **Objectives:** After completing this unit, you will be able to correctly use the vocabulary, phrases, and sentences to orally describe definitions, characteristics, interventions, and assessments of patients with depression and suicide risk.	
5 Information Transfer	**Overview:** In this unit, you will learn about how to transfer useful information using nursing shift report forms. There are two forms in English version; form A and form B. Form A is a summary for the whole shift while form B is about an individual care plan form. You will review and gain more vocabulary, phrases, and sentences through reading and listening to short forms and sample scripts. Also, you can go through useful grammar in the grammar focus sections. After learning, you will complete exercises and a unit test to check your knowledge of general information of a shift summary and the individual care plan as well as your understanding of learned vocabulary, phrases and sentences by completing true or false, matching, and multiple-choice questions. **Content:** 5.1 Summary Shift Reports 5.2 Individual Case Reports	5.1 Multiple-Choice 5.2 True/False

Unit	Unit Overview and Objectives	Assessment
	Objectives: After completing this unit, you will be able to correctly use the vocabulary, phrases, and sentences to orally report the information presented in the forms about the shift summary and the individual care plan.	

APPENDIX C

The Scoring Rubric Criteria for Assessing Oral Presentation Skills for RPNs (English Version)

Criteria	4	3	2	1	Total
Accuracy of Content	Information (names, facts, etc.) included in the presentation is consistently accurate.	No significant errors are made. Listeners recognize any errors to be the result of nervousness or oversight.	Enough errors are made to distract a knowledgeable listener, but some information is accurate. The presentation is useful if the listener can determine what information is reliable.	Information included is sufficiently inaccurate that the listener cannot depend on the presentation as a source of accurate information. Listeners may have been misled.	
Use of Language: Grammar and Word Choice	Sentences are complete and grammatical and they flow together easily. Words are chosen for their precise meaning.	For the most part, sentences are complete and grammatical, and they flow together easily. With a few exceptions, words are chosen for their precise meaning.	Listeners can follow the presentation, but some grammatical errors and use of slang are evident. Some sentences are incomplete / halting, and/or vocabulary is somewhat limited or inappropriate.	Listeners are so distracted by the presenter's apparent difficulty with grammar and appropriate vocabulary that they cannot focus or the ideas presented.	
Pronunciation	Pronunciation and intonation is correct and confident.	Pronunciation and intonation is usually correct.	Pronunciation occasionally correct, but often hesitant and inaccurate.	Pronunciation generally incorrect, and often hesitant.	

(Adapted from Oral Presentation Rubric provided by Department of Educational Leadership and Policy Studies, IOWA State of University)

The Scoring Rubric Criteria for Assessing Oral Presentation Skills for RPNs (Thai Version)

เกณฑ์การให้คะแนนสำหรับการประเมินทักษะการนำเสนอโดยการบรรยายปากเปล่า

เกณฑ์การประเมิน	4	3	2	1	คะแนน
ความถูกต้องของเนื้อหา	ข้อมูล (ชื่อ ข้อเท็จจริง ฯลฯ) ที่กล่าวถึงตลอดการนำเสนอถูกต้อง	มีข้อผิดพลาดเล็กๆ น้อยๆ และผู้ฟังเข้าใจว่าข้อผิดพลาดดังกล่าวเกิดจากความประหม่าหรือเพราะไม่ทันสังเกต	มีข้อผิดพลาดจนเป็นที่สังเกตได้แต่ก็มีข้อมูลที่ถูกต้องอยู่บ้าง การนำเสนอจะเป็นประโยชน์หากผู้ฟังสามารถแยกแยะเองได้ว่าข้อมูลใดที่เชื่อถือได้	ข้อมูลที่นำเสนอแทบไม่มีความถูกต้องจนผู้ฟังไม่สามารถเชื่อว่าข้อมูลนั้นๆ มีความถูกต้อง ผู้ฟังอาจถูกชักจูงให้เชื่อในข้อมูลที่ไม่ถูกต้อง	
การใช้ภาษา: ไวยากรณ์และการเลือกใช้คำ	ประโยคสมบูรณ์และถูกต้องตามหลักไวยากรณ์เลือกใช้คำศัพท์ได้ถูกต้องตรงตามความหมายที่ต้องการสื่อ	โดยส่วนใหญ่เป็นประโยคสมบูรณ์และถูกต้องตามหลักไวยากรณ์ คำศัพท์ส่วนใหญ่เลือกใช้ได้ตรงกับความหมายที่ต้องการสื่อ	บางประโยคเป็นประโยคสมบูรณ์และถูกต้องตามหลักไวยากรณ์ แต่ส่วนใหญ่เป็นประโยคไม่สมบูรณ์และการเลือกใช้คำยังค่อนข้างจำกัดและยังไม่ตรงตามความหมายที่ต้องการสื่อ	ประโยคส่วนใหญ่เป็นประโยคไม่สมบูรณ์และไม่ถูกหลักไวยากรณ์ การเลือกใช้คำศัพท์มีความจำกัดมากทำให้เข้าใจความหมายที่ต้องการสื่อได้ยาก	
การออกเสียง	การออกเสียงและการใช้เสียงสูงเสียงต่ำในประโยคมีความถูกต้องและมีความมั่นใจ	การออกเสียงและการใช้เสียงสูงเสียงต่ำในประโยคโดยส่วนใหญ่มีความถูกต้อง	การออกเสียงและการใช้เสียงสูงเสียงต่ำในบางประโยคมีความถูกต้อง และมีความลังเล	การออกเสียงและการใช้เสียงสูงเสียงต่ำในหลายประโยคไม่ถูกต้องและมีความลังเล	

APPENDIX D

The Questionnaire of the RPNs' Attitudes toward Learning through the EPN Program for Enhancing Oral Presentation Skills (English Version)

This questionnaire is designed to collect demographical and attitudinal information about the RPNs' attitudes toward learning through the EPN program for enhancing oral presentation skills in English for Thai adult registered psychiatric nurses. The questionnaire is divided into 3 parts.

Part 1: Personal information

Part 2: Attitudes toward the EPN program

Part 3: Attitudes toward learning through the EPN program

Part 1: Personal information

Instruction: Please mark ☐ in the box or the space provided.

1. Gender: ☐ Male ☐ Female
2. Age: …….
3. Level of Education:
   ☐ Bachelor's degree ☐ Master's degree ☐ Other (Please specify…….)
4. Years of work experience as a registered psychiatric nurse:
   ☐ Below 5 years ☐ 5 – 10 years ☐ Over 10 years
5. Prior to learning with the EPN program, how many times have you given verbal shift reports in English?
   ☐ 1 – 5 times ☐ 6 – 10 times
   ☐ 10 – 15 times ☐ over 15 times

Part 2: Attitudes toward EPN module

Instruction: Read the statements and mark ✓ in the box provided according to the degree of agreement.

5 = strongly agree
4 = agree
3 = undecided
2 = disagree
1 = strongly disagree

Example

Statements	Degree of Agreement / Rating Scale				
	strongly agree	agree	undecided	disagree	strongly disagree
	5	**4**	**3**	**2**	**1**
1. Content					
1.1 The learning objectives in each unit are clear.	✓				
1.2 The content is in line with the objectives.		✓			

Statements	Degree of Agreement / Rating Scale				
	strongly agree	agree	undecided	disagree	strongly disagree
	5	**4**	**3**	**2**	**1**
1. Content					
1.1 The learning objectives in each unit are clear.					
1.2 The content is in line with the objectives.					
1.3 The amount of the content in each unit is appropriate.					

Statements	Degree of Agreement / Rating Scale				
	strongly agree	agree	undecided	disagree	strongly disagree
	5	**4**	**3**	**2**	**1**
1.4 The content is appropriate in terms of difficulty level.					
1.5 The content is accurate.					
2. Exercises and Tests					
2.1 The practices/tests are in line with the content and the objectives.					
2.2 There are a variety of practices/tests formats.					
2.3 The number of exercise/test items is appropriate.					
2.4 The exercises/tests are appropriate in terms of level of difficulty.					
3. Design					
3.1 The log-in is not complicated.					
3.2 The e-Learning is user-friendly and easy to navigate.					
3.3 The type, size and color of fonts are clear and readable.					
3.4 The quality of text, graphic, and audio is appropriate.					

Part 3: Attitudes toward learning through EPN module
Instruction: Read the statements and mark ✓ in the box provided according to the degree of agreement.

Statements	Degree of Agreement / Rating Scale				
	strongly agree	agree	neither agree or disagree	disagree	strongly disagree
	5	**4**	**3**	**2**	**1**
1 The content in the EPN program fits your needs.					
2 You have gained more vocabulary and phrases that are useful for giving shift reports on patients with schizophrenia.					
3 The audio files help improve your pronunciation.					
4 The section 'Grammar Focus' helps you form better sentences for giving verbal shift reports on patients with schizophrenia.					
5 The EPN program helps you give verbal shift reports more accurately.					
6 The EPN program increases your confidence in giving shift reports in English.					

Thank you very much for your cooperation.

The Questionnaire of the RPNs' Attitudes toward Learning through the EPN Program for Enhancing Oral Presentation Skills (Thai Version)

แบบสอบถามความคิดเห็นสำหรับพยาบาลจิตเวช

แบบสอบถามฉบับนี้ใช้สำหรับการเก็บข้อมูลส่วนตัวและข้อมูลเชิงทัศนคติที่เกี่ยวข้องกับความคิดเห็นของพยาบาลจิตเวชที่มีต่อการเรียนผ่านบทเรียนอีเลิร์นนิงเพื่อเพิ่มทักษะการนำเสนอโดยการบรรยายปากเปล่าสำหรับพยาบาลจิตเวชไทย

แบบสอบถามประกอบไปด้วย 3 ส่วน

ส่วนที่ 1: ข้อมูลทั่วไป

ส่วนที่ 2: ความคิดเห็นต่อบทเรียนอีเลิร์นนิง

ส่วนที่ 3: ความคิดเห็นต่อการเรียนผ่านบทเรียนอีเลิร์นนิง

ส่วนที่ 1: ข้อมูลทั่วไป

คำชี้แจง: โปรดทำเครื่องหมาย ✓ ลงใน ☐ หน้าคำตอบที่ท่านเลือกในแต่ละคำถามตามความเป็นจริง

1. เพศ: ☐ ชาย ☐ หญิง
2. อายุ: ……
3. ระดับการศึกษาสูงสุด:
   ☐ ปริญญาตรี ☐ ปริญญาโท ☐ อื่นๆ (โปรดระบุ……..)
4. ประสบการณ์การทำงานในฐานะที่เป็นพยาบาลจิตเวช:
   ☐ น้อยกว่า 5 ปี ☐ 5 – 10 ปี ☐ มากกว่า 10 ปี
5. ก่อนเริ่มเรียนผ่านบทเรียนอีเลิร์นนิง ท่านได้ส่งเวรเป็นภาษาอังกฤษในหอผู้ป่วยมาแล้วกี่ครั้ง:
   ☐ 1 – 5 ครั้ง ☐ 6 – 10 ครั้ง
   ☐ 10 – 15 ครั้ง ☐ มากกว่า 15 ครั้ง

ส่วนที่ 2: ความคิดเห็นต่อบทเรียนอีเลิร์นนิง

คำชี้แจง:โปรดทำเครื่องหมาย ✓ ลงในช่องว่าด้านขวามือที่ตรงกับความคิดเห็นของท่านมากที่สุดตามความเป็นจริง เพื่อประโยชน์ในการวิเคราะห์ข้อมูล โดยประมาณค่าของระดับความคิดเห็นด้วยดังนี้

5	หมายถึง	เห็นด้วยอย่างยิ่ง
4	หมายถึง	เห็นด้วย
3	หมายถึง	ไม่แน่ใจ
2	หมายถึง	ไม่เห็นด้วย
1	หมายถึง	ไม่เห็นด้วยอย่างยิ่ง

ตัวอย่าง

ประเด็นความคิดเห็น	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง	เห็นด้วย	ไม่แน่ใจ	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
	5	4	3	2	1
1. ด้านเนื้อหา 1.1 วัตถุประสงค์การเรียนรู้มีความชัดเจน	✓				
1.2 เนื้อหาบทเรียนสอดคล้องกับวัตถุประสงค์		✓			

ประเด็นความคิดเห็น	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง	เห็นด้วย	เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
	5	4	3	2	1
1. ด้านเนื้อหา 1.1 วัตถุประสงค์การเรียนรู้ในแต่ละบทมีความชัดเจน					
1.2 เนื้อหาในบทเรียนสอดคล้องกับวัตถุประสงค์การเรียนรู้					
1.3 ปริมาณเนื้อหาในแต่ละบทมีความเหมาะสม					
1.4 เนื้อหาในบทเรียนถูกต้อง					
1.5 ระดับความยากง่ายของเนื้อหามีความเหมาะสม					
2. ด้านแบบทดสอบ 2.1 แบบทดสอบตรงตามวัตถุประสงค์และเนื้อหา					
2.2 รูปแบบของแบบทดสอบมีความหลากหลาย					
2.3 จำนวนข้อในแบบทดสอบมีความเหมาะสม ไม่มากหรือน้อยเกินไป					
2.4 ข้อคำถามในแบบทดสอบมีความเหมาะสม ไม่ยากหรือง่ายจนเกินไป					
3. ด้านการออกแบบ 3.1 การเข้าใช้งานบทเรียน (log in) ทำได้ง่ายไม่ยุ่งยาก					
3.2 บทเรียนใช้งานง่ายไม่สับสน					
3.3 คุณภาพของสื่อการเรียน เช่น ข้อความ ภาพนิ่ง เสียง อยู่ในเกณฑ์ดี					
3.4 รูปแบบ ขนาด และสีตัวอักษรมีความเหมาะสม ชัดเจน อ่านง่าย					

ส่วนที่ 3: ความคิดเห็นต่อการเรียนผ่านบทเรียนอีเลิร์นนิง

คำชี้แจง:โปรดทำเครื่องหมาย ✓ ลงในช่องว่าด้านขวามือที่ตรงกับความคิดเห็นของท่านมากที่สุดตามความเป็นจริง

ประเด็นความคิดเห็น	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง	เห็นด้วย	ไม่แน่ใจ	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
	5	**4**	**3**	**2**	**1**
1. เนื้อหาในบทเรียนอีเลิร์นนิงเรื่องการส่งเวรผู้ป่วยโรคจิตเภทเป็นภาษาอังกฤษตรงกับความต้องการของท่านในฐานะพยาบาลจิตเวช					
2. บทเรียนอีเลิร์นนิงนี้ช่วยทำให้ท่านทราบคำศัพท์และสำนวนที่เป็นประโยชน์ต่อการส่งเวรผู้ป่วยโรคจิตเภทเป็นภาษาอังกฤษมากขึ้น					
3. สื่อเสียง (audio file) ในบทเรียนอีเลิร์นนิงช่วยให้ออกเสียงคำศัพท์หรือรูปประโยคภาษาอังกฤษได้อย่างถูกต้องมากขึ้น					
4. หลักไวยากรณ์และตัวอย่างในบทเรียนอีเลิร์นนิงมีประโยชน์ต่อการแต่งประโยคเพื่อการส่งเวรผู้ป่วยจิตเภทเป็นภาษาอังกฤษ					
5. บทเรียนอีเลิร์นนิงช่วยให้ท่านสามารถส่งเวรผู้ป่วยจิตเภทเป็นภาษาอังกฤษได้ถูกต้องมากขึ้น					
6. บทเรียนอีเลิร์นนิงช่วยให้ท่านมีความมั่นใจในการส่งเวรเป็นภาษาอังกฤษมากขึ้น					

ขอบคุณที่ให้ความร่วมมือในการตอบแบบสอบถาม

APPENDIX E

Semi-Structured Interview Questions

(English Version)

Guided questions for the RPNs:

1. Do you enjoy learning through the EPN program? Why or why not?

2. Do you find the EPN program helpful for you? Why or why not?

3. Which learning module do you find the most helpful in helping you give better nursing shift reports in English?

4. Do you find any part(s) of the course content in the EPN program too easy? If you do, what section is too easy?

5. Do you find any part(s) of the course content in the EPN program too difficult? If you do, what section is too difficult?

6. Do you believe you are capable of learning entirely by yourself in an online environment? Why or why not?

7. Do you have any suggestions or feedback to help improve the quality the EPN program?

Semi-Structured Interview Questions
(Thai Version)

คำถามสำหรับพยาบาลจิตเวช:

1. ท่านชอบเรียนผ่านทางบทเรียนอีเลิร์นนิงหรือไม่? ชอบหรือไม่ชอบเพราะอะไร?
2. ท่านเห็นว่าบทเรียนอีเลิร์นนิงมีประโยชน์ต่อท่านหรือไม่? มีหรือไม่มีประโยชน์เพราะอะไร?
3. ท่านคิดว่าบทเรียนหลักหรือบทเรียนย่อยใดในอีเลิร์นนิงที่มีประโยชน์ต่อการช่วยให้ท่านส่งเวรเป็นภาษาอังกฤษได้ดีขึ้นมากที่สุด?
4. ท่านคิดว่ามีส่วนใดของบทเรียนอีเลิร์นนิงที่ง่ายเกินไปหรือไม่? หากมี โปรดระบุ
5. ท่านคิดว่ามีส่วนใดของบทเรียนอีเลิร์นนิงที่ยากไปหรือไม่? หากมี โปรดระบุ
6. ท่านคิดว่าท่านสามารถเรียนรู้ด้วยตนเองผ่านการเรียนรู้แบบอีเลิร์นนิงได้หรือไม่? ได้หรือไม่ได้เพราะอะไร?
7. ท่านมีข้อเสนอแนะหรือข้อติชมที่จะเป็นประโยชน์ต่อการพัฒนาปรับปรุงบทเรียนอีเลิร์นนิงหรือไม่? หากมี โปรดประบุ

APPENDIX F

The Results of the RPNs' E1/E2 Scores

The Exercise: Scores in 5 units

No.	Exercise1 (110)	Exercise2 (110)	Exercise3 (120)	Exercise4 (120)	Exercise5 (60)	TOTAL (520)
1	90	90	114	104	48	446
2	98	88	114	97	54	451
3	88	98	102	103	54	445
4	100	98	86	114	54	452
5	90	88	102	109	48	437
6	73	78	76	88	30	345
7	90	98	120	103	48	459
8	110	110	104	109	54	487
9	83	88	88	82	54	395
10	88	98	86	88	42	402
11	100	100	92	93	54	439
12	100	110	92	97	48	447
13	95	90	92	103	42	422
14	100	98	104	115	54	471
15	95	90	104	108	48	445
16	100	90	102	115	60	467
17	95	98	108	109	54	464
18	100	100	114	103	54	471
19	100	88	98	114	54	454
20	110	110	110	110	60	500
21	88	98	110	110	48	454
22	88	98	98	88	54	426
23	110	90	104	109	54	467
24	88	98	88	99	54	427
25	98	90	88	104	48	428
26	90	90	98	98	54	430
27	83	78	86	88	36	371
28	90	88	98	99	42	417
29	90	90	108	114	54	456
30	93	98	108	94	48	441
TOTAL	**2823**	**2826**	**2994**	**3067**	**1506**	**13216**

The Exercise: Cumulative Scores in 5 units

No.	Full Scores	Earned Scores	Average	SD	Percentage
1	520	446			85.77
2	520	451			86.73
3	520	445			85.58
4	520	452			86.92
5	520	437			84.04
6	520	345			66.35
7	520	459			88.27
8	520	487			93.65
9	520	395			75.96
10	520	402			77.31
11	520	439			84.42
12	520	447			85.96
13	520	422			81.15
14	520	471			90.58
15	520	445	**440.53**	**32.11**	85.58
16	520	467			89.81
17	520	464			89.23
18	520	471			90.58
19	520	454			87.31
20	520	500			96.15
21	520	454			87.31
22	520	426			81.92
23	520	467			89.81
24	520	427			82.12
25	520	428			82.31
26	520	430			82.69
27	520	371			71.35
28	520	417			80.19
29	520	456			87.69
30	520	441			84.81
TOTAL	**15600**	**13216**			**84.72**

The Test: Scores in 5 units

No.	Unit1 (60)	Unit2 (60)	Unit3 (60)	Unit4 (60)	Unit5 (60)	TOTAL
1	55	55	50	50	50	260
2	50	55	55	50	40	250
3	50	50	30	55	30	215
4	55	55	55	55	60	280
5	50	55	55	55	50	265
6	40	40	45	45	40	210
7	50	55	50	52.5	50	257.5
8	60	60	55	55	50	280
9	40	55	55	60	50	260
10	50	50	50	45	40	235
11	50	55	50	52.5	50	257.5
12	50	55	55	50	50	260
13	50	50	50	50	50	250
14	60	55	55	60	50	280
15	50	55	55	55	40	255
16	55	50	50	55	50	260
17	50	50	50	55	60	265
18	55	55	50	50	50	260
19	55	50	45	55	50	255
20	60	60	50	55	60	285
21	50	50	55	50	50	255
22	50	55	45	45	50	245
23	60	50	55	55	50	270
24	55	55	50	50	50	260
25	50	50	50	55	50	255
26	55	55	55	55	60	280
27	50	45	40	45	40	220
28	55	50	45	50	50	250
29	55	55	50	55	50	265
30	50	55	55	50	50	260
TOTAL	**1565**	**1585**	**1510**	**1570**	**1470**	**7700**

The Test: Cumulative Scores in 5 units

No.	Unit Scores	Earned Scores	Average	SD	Percentage
1	300	260	256.67	18.06	86.67
2	300	250			83.33
3	300	215			71.67
4	300	280			93.33
5	300	265			88.33
6	300	210			70.00
7	300	257.5			85.83
8	300	280			93.33
9	300	260			86.67
10	300	235			78.33
11	300	257.5			85.83
12	300	260			86.67
13	300	250			83.33
14	300	280			93.33
15	300	255			85.00
16	300	260			86.67
17	300	265			88.33
18	300	260			86.67
19	300	255			85.00
20	300	285			95.00
21	300	255			85.00
22	300	245			81.67
23	300	270			90.00
24	300	260			86.67
25	300	255			85.00
26	300	280			93.33
27	300	220			73.33
28	300	250			83.33
29	300	265			88.33
30	300	260			86.67
TOTAL	**9000**	**7700**			**85.56**

APPENDIX G

The Results of the RPNs' Oral Pretest/Posttest Scores

Pretest – Rater A

Learner Number	Criteria for Assessing Oral Presentation Skills			Total
	Accuracy of Content	Use of Language: Grammar & Word Choice	Pronunciation	
1	3	2	3	**8**
2	2	2	2	**6**
3	3	1	2	**6**
4	2	2	2	**6**
5	3	1	2	**6**
6	3	2	2	**7**
7	2	1	2	**5**
8	2	2	2	**6**
9	3	2	2	**7**
10	2	1	2	**5**
11	3	2	2	**7**
12	3	2	2	**7**
13	3	2	2	**7**
14	2	1	2	**5**
15	2	1	2	**5**
16	3	1	2	**6**
17	3	2	2	**7**
18	2	1	2	**5**
19	3	2	2	**7**
20	2	1	1	**4**
21	3	2	2	**7**
22	2	1	2	**5**
23	2	1	2	**5**
24	2	1	2	**5**
25	3	1	2	**6**
26	3	2	2	**7**
27	3	2	2	**7**
28	2	1	2	**5**
29	2	2	2	**6**
30	3	2	3	**8**
Total	**76**	**46**	**61**	**183**

Pretest – Rater B

Learner Number	Criteria for Assessing Oral Presentation Skills			Total
	Accuracy of Content	Use of Language: Grammar & Word Choice	Pronunciation	
1	3	2	3	**8**
2	3	2	2	**7**
3	3	1	2	**6**
4	3	2	2	**7**
5	3	1	2	**6**
6	3	2	2	**7**
7	2	1	2	**5**
8	3	2	2	**7**
9	3	2	2	**7**
10	2	1	2	**5**
11	3	2	2	**7**
12	3	3	2	**8**
13	3	2	2	**7**
14	2	1	2	**5**
15	2	1	2	**5**
16	3	1	2	**6**
17	3	2	2	**7**
18	2	2	2	**6**
19	3	2	2	**7**
20	2	1	2	**5**
21	2	2	2	**6**
22	2	1	2	**5**
23	2	1	2	**5**
24	2	1	2	**5**
25	3	1	2	**6**
26	3	2	2	**7**
27	3	2	2	**7**
28	2	1	2	**5**
29	2	2	2	**6**
30	3	3	3	**9**
Total	**78**	**49**	**62**	**189**

Posttest – Rater A

Learner Number	Criteria for Assessing Oral Presentation Skills			Total
	Accuracy of Content	Use of Language: Grammar & Word Choice	Pronunciation	
1	4	4	4	**12**
2	4	3	3	**10**
3	3	2	2	**7**
4	3	3	2	**8**
5	3	2	2	**7**
6	4	3	3	**10**
7	3	2	3	**8**
8	3	2	3	**8**
9	3	2	3	**8**
10	3	3	2	**8**
11	3	2	3	**8**
12	4	3	3	**10**
13	3	3	2	**8**
14	2	2	2	**6**
15	2	2	2	**6**
16	3	3	2	**8**
17	4	3	2	**9**
18	3	2	3	**8**
19	3	3	3	**9**
20	2	2	2	**6**
21	3	2	3	**8**
22	3	2	3	**8**
23	2	2	2	**6**
24	3	2	2	**7**
25	3	2	2	**7**
26	4	3	3	**10**
27	3	3	3	**9**
28	3	2	2	**7**
29	3	3	2	**8**
30	4	3	3	**10**
Total	**93**	**75**	**76**	**244**

Posttest – Rater B

Learner Number	Criteria for Assessing Oral Presentation Skills			Total
	Accuracy of Content	Use of Language: Grammar & Word Choice	Pronunciation	
1	4	4	4	**12**
2	4	3	3	**10**
3	3	2	3	**8**
4	4	3	2	**9**
5	3	3	2	**8**
6	4	3	3	**10**
7	3	2	3	**8**
8	3	2	3	**8**
9	3	2	3	**8**
10	3	3	2	**8**
11	3	3	2	**8**
12	4	3	3	**10**
13	3	3	2	**8**
14	2	2	3	**7**
15	2	2	2	**6**
16	3	3	2	**8**
17	4	3	3	**10**
18	3	2	3	**8**
19	3	2	3	**8**
20	2	2	2	**6**
21	3	2	3	**8**
22	3	2	3	**8**
23	2	2	3	**7**
24	2	3	2	**7**
25	3	2	2	**7**
26	4	3	3	**10**
27	3	3	3	**9**
28	3	2	3	**8**
29	3	3	2	**8**
30	4	3	4	**11**
Total	**93**	**77**	**81**	**251**

Pretest/Posttest from Two Raters

Learners	Pretest	Posttest	Differences
1.	8	12	4
2.	6	10	4
3.	6	7	1
4.	6	8	2
5.	6	7	1
6.	7	10	3
7.	5	8	3
8.	6	8	2
9.	7	8	1
10.	5	8	3
11.	7	8	1
12.	7	10	3
13.	7	8	1
14.	5	6	1
15.	5	6	1
16.	6	8	2
17.	7	9	2
18.	5	8	3
19.	7	8	1
20.	4	6	2
21.	6	8	2
22.	5	8	3
23.	5	6	1
24.	5	7	2
25.	6	7	1
26.	7	10	3
27.	7	9	2
28.	5	7	2
29.	6	8	2
30.	8	10	2
($\bar{x}$)	**6.07**	**8.10**	**2.03**
S.D.	**1.015**	**1.423**	**0.928**
N = 30			**Sig = .000**

APPENDIX H

Semi-Structured Interview: Questions and Responses

Interview Questions and Responses:

1. Do you enjoy learning through the EPN program? Why or why not?

Interviewee	Response
RPN 01	Yes. I enjoy learning sections about vocabulary and content because they are useful for me.
RPN 02	Yes. I particularly like learning grammar. I can form better sentences.
RPN 03	Yes. I like reading through the content and learning new vocabulary because I think they are useful.
RPN 04	Yes. I like content and grammar sections. They are useful and I can access it anywhere and anytime.
RPN 05	Yes. I enjoy learning every section of the EPN program: content, vocabulary, grammar, and exercises.
RPN 06	Yes. I like vocabulary and grammar sections because they are what I want to learn. I want to learn new vocabulary to use in my shift handover and I want sentences I can use immediately.
RPN 07	Yes. I really like the content about symptoms and conditions of patients with schizophrenia.
RPN 08	Yes. I like it and it is convenient because I use the hospital's Internet access to learn new vocabulary and grammar.
RPN 09	Yes. I like sentence examples in grammar section. I can note down those examples and use for my reports.
RPN 10	Yes. I like content, vocabulary, and grammar in the program because when I give shift reports, I log on to search for vocabulary and sentences to use.
RPN 11	Yes. I like to learn new vocabulary and there are so many new words.
RPN 12	Yes. I enjoy learning the content. It is interesting and practical because we have cared for many schizophrenics so I think I can understand most of the content in English.

2. Do you find the EPN program helpful for you? Why or why not?

Interviewee	Response
RPN 01	Yes, the EPN program is useful. I learn specific words and I feel it is convenient to add new words into sentences.
RPN 02	Yes, it is a useful learning tool. I think it will help improve my English for the upcoming AEC.
RPN 03	It is very useful. I learn a lot of new vocabulary and sentences.
RPN 04	Yes. I feel more confident in giving shift reports in English. I learn correct pronunciation, grammar and vocabulary especially about patients' symptoms.
RPN 05	Yes. It will be helpful to know some English in case there is any foreign inpatient.
RPN 06	It is useful because I think I can form more grammatical sentences for shift reports after learning through sections of grammar focus and I can use better word choices.
RPN 07	The content, vocabulary, sentence examples and grammar in the EPN program are helpful because I learn to form better sentences for shift reports.
RPN 08	It is very useful because we have to learn some English for the opening of AEC next year.
RPN 09	It is helpful for nurses who want to practice giving shift reports in English. I also think that it is a good way for us to learn some English for the opening of AEC in 2015.
RPN 10	Yes, the EPN program is very useful for improving my English. It can be a guide to help me learn to use correct vocabulary and grammar to prepare myself for the upcoming AEC.
RPN 11	Yes, it is useful. The content and some examples can be applied in giving shift reports and I can use them as a guide.
RPN 12	I think it is helpful because I learned how to apply grammar rules and use and pronounce vocabulary more correctly. Also, it is better than looking up for wards in a dictionary and just put them together in a sentence like I used to do.

3. Which learning module do you find the most helpful in helping you give better nursing shift reports in English?

Interviewee	Response
RPN 01	All modules**.**
RPN 02	Module 5**.**
RPN 03	All modules**.**
RPN 04	The last module about examples of shift reports is the most useful.
RPN 05	All modules**.**
RPN 06	Module 5**.**
RPN 07	Module 5**.**
RPN 08	I think every module is very helpful because my English is not that good. I am slow so I need to repeatedly learn vocabulary, pronunciations and sentence examples. I like that I can print out vocabulary and grammar to read because I do not have much time to sit in front of the screen when I am on the shift**.**
RPN 09	All modules because there are lists of vocabulary and good sentence examples that will come in handy when giving shift reports.
RPN 10	I think all modules are helpful because there are a good number of different vocabulary and sentence examples available in the EPN program.
RPN 11	The parts about patients' symptoms and conditions are very practical.
RPN 12	I think all modules are useful because we deal with patients with schizophrenia a lot. Plus, I get to learn vocabulary and how to form sentences in English. I recognize many mental health related vocabulary so it's fun to learn.

4. Do you find any part(s) of the course content in EPN module too easy? If you do, what section is too easy?

Interviewee	Response
RPN 01	No. All modules are appropriate.
RPN 02	I think the first part of Module 1 is the easiest, but it is not too easy.
RPN 03	Every module is appropriate.
RPN 04	No. English is not too easy.

RPN 05	No. They are not too easy. They are in English.
RPN 06	Appropriate**.**
RPN 07	No, not too easy.
RPN 08	I am familiar with those topics, but they are in English so I don't think they are that easy. I have to depend on Thai translations.
RPN 09	I don't think they are too easy. I try to guess the overall content, but I don't think I am always correct.
RPN 10	No. There are too many vocabulary words I don't know.
RPN 11	It is not too easy because I have to read Thai translation when I am unsure about the content I learn.
RPN 12	The definition of schizophrenia is short and I guess it is easy at the beginning. I get a perfect score for this practice, but it is not that easy.

5. Do you find any part(s) of the course content in EPN module too difficult? If you do, what section is too difficult?

Interviewee	Response
RPN 01	All modules are appropriate.
RPN 02	I think the content is Module 3 is overwhelming and that is perhaps why I think it is the most difficult compared to other modules.
RPN 03	Some parts are very difficult but there are Thai texts available so I sometimes read them in Thai first.
RPN 04	All modules are fine as I can read Thai translations when I get stuck.
RPN 05	All modules are OK.
RPN 06	All modules are appropriate**.**
RPN 07	I download and print out a complete list of vocabulary especially for Module 3 because there are too many new words. I think Module 3 is the most difficult, but it is not too difficult because I can guess what the content is about sometimes and I can check if I am right by reading it in Thai.
RPN 08	My English is very poor so I think all units are difficult, but not too difficult because I can click to read texts in Thai and I know something about schizophrenia too.

RPN 09	I think most modules are difficult because I don't know vocabulary. I read and listen to texts, but I can barely recognize those words. If I know vocabulary, it will be easier.
RPN 10	I have to read questions in some units several times before I understand them. I think some questions are too long so I think it is too difficult if the questions are too long.
RPN 11	Practices and tests in Module 3 are quite difficult.
RPN 12	They are difficult, but not too difficult. I think it really takes time for me to understand the content in most units. I try to guess what it is about from the topic. It is good to see something familiar to what I know, like content in those HoNOS or 2Q, 8Q, 9Q forms.

6. Do you have and trouble learning entirely by yourself in an online environment? Why or why not?

Interviewee	Response
RPN 01	I can learn by myself but I get very busy at the ward especially when I work morning and afternoon shifts. So I don't have much time to relearn or review anything.
RPN 02	I have never learned through e-Learning module, but I don't think it is too difficult. It just takes time to get familiar with the module.
RPN 03	Sometimes the Internet connection is very slow and I can't wait for the page to load so I can't use it as often as I want to. Make the course in CD so that I can install it on my home computer and use it offline.
RPN 04	I don't have any problem. I use my tablet to learn. The screen is a bit small, but it is quite convenient.
RPN 05	I don't have any problem learning by myself, but I think you should come to the ward to ask us about learning. Some nurses won't learn without being constantly motivated.
RPN 06	No. I am guided to learn how to navigate through the website and every section is the same in every unit so it is not that confusing.
RPN 07	Not at all, I don't think it's not that complicated. But sometimes it's difficult to learn on a computer when I'm in charge. It's my job to make sure everything is OK. So, I'm glad the materials are downloadable and printable.
RPN 08	No, I don't have any problem. It looks just like a website. But we have to prepare ourselves for the hospital re-accreditation in a few

	months and we are very busy. I really think the module is very useful, but only if I have more time. You know, it will be better if I don't have to learn within a timeframe.
RPN 09	I think registration requires too many steps. I have to click too many links and it is frustrating because everything is in English. It takes a lot of time for me and I think for other nurses my age to really know how to use the module. I don't think we read the "How to" section. I don't. I just want to go straight to lessons.
RPN 10	I don't have any problem. But I'm very busy working. There are patients on admission and on discharge almost every shift every day.
RPN 11	I prefer learning in a class because I am old and slow when it comes to technology. I think it is better to have some interactions with a teacher and friends. I like group work.
RPN 12	I like learning online. It is new but I think it is better because I can learn when I want. The problem is I am busy at work and I am too tired to do anything when I go home.

7. Do you have any suggestions or feedback to help improve the quality of this e-Learning module?

Interviewee	Response
RPN 01	Maybe you can create another course with other subject matters in the field of mental health and psychiatry.
RPN 02	Make content shorter and make questions in exercises and tests easier.
RPN 03	Sometimes the Internet connection is slow so make the e-Learning in CD so we can install on computers and use it offline.
RPN 04	I think I will want to learn some conversational English too.
RPN 05	I want some general English such as numbers, telling time and dates.
RPN 06	The EPN program is very useful, but it takes time. I think we need to set a study time that does not interfere with work.
RPN 07	I think the audio is fast, I cannot follow.
RPN 08	The audio is too fast and some clips are too long.

RPN 09	There are too many folders to click and they somehow make me want to leave the study. It is easier for me to learn if all contents in subunits are in one place just like those in the textbook.
RPN 10	I don’t even know how to correctly say numbers, dates, and months so I need to start with basic English.
RPN 11	For me, e-Learning is very new so I want to be trained how to learn it. Also, it will be easier if the instructions in the module are in Thai**.**
RPN 12	Maybe add more examples because each ward is different. In my ward, most patients are diagnosed with alcohol abuse and the examples are mostly about paranoid schizophrenia.

APPENDIX I

A Consent Letter (English Version)

A Consent Letter for the Participated RPNs

I, Miss Benyahpa Tumsadauk, a Master's Degree student of the School of Foreign Languages, Institute of Social Technology at Suranaree University of Technology, am currently conducting a research study on "An English Oral Presentation Skills Enhancement Model for Thai Registered Psychiatric Nurses". In order to ensure the practicality and efficiency of the EPN program about giving shift reports on patients with schizophrenia in English, the researcher requires cooperation from the register psychiatric nurses at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital who have been trained in the workshop "Nursing Process and Documentation for Mental Health Nurses" to participate in this study. The module comprises of 5 modules which can be completed within 30 days on time and place of your convenience. If you agree to participate, you will learn through the EPN program, record brief reports for the oral pretest/posttest, complete the questionnaire, and answer interview questions.

Please be noted that your decision on participating in the study will be voluntary and you will not be professionally affected from not participating. Your information and attitudes will be exclusively used for the sake of this research only. You can freely discontinue the participation from this study even after you have signed this consent letter. Should you have any questions, please contact the researcher directly.

I appreciate your well-cooperation in advance.

Researcher

For the participant:

I have acknowledged the information and provided consent to participate in this study.

Signature

……..
(……...……..)

……./……./…….

A Consent Letter (Thai Version)

ใบยินยอมพิทักษ์สิทธิ์ผู้เข้าร่วมการวิจัย

เนื่องด้วย นางสาวเบญญาภา ทำสะดวก นักศึกษาระดับปริญญาโท หลักสูตรศิลปศาสตรมหาบัณฑิต สาขาวิชาภาษาต่างประเทศ สำนักวิชาเทคโนโลยีสังคม มหาวิทยาลัยเทคโนโลยีสุรนารี กำลังดำเนินงานวิจัย เรื่อง "รูปแบบจำลองการเรียนรู้ผ่านสื่ออิเล็กทรอนิกส์เพื่อพัฒนาทักษะการนำเสนอด้วยวาจาเป็นภาษาอังกฤษสำหรับพยาบาลจิตเวชไทย" ซึ่งบทเรียนอีเลิร์นนิงดังกล่าว มีเนื้อหาหลักเป็นภาษาอังกฤษ เกี่ยวกับการส่งเวรผู้ป่วยโรคจิตเภท (Schizophrenics) ผู้วิจัยหวังเป็นอย่างยิ่งว่า บทเรียนอีเลิร์นนิงนี้น่าจะมีประโยชน์ต่อการพัฒนะทักษะภาษาอังกฤษแก่พยาบาลวิชาชีพที่ปฏิบัติงานในโรงพยาบาลจิตเวชนครราชสีมาราชนครินทร์ ทั้งนี้ เพื่อให้บทเรียนอีเลิร์นนิงนี้มีประสิทธิภาพ เหมาะสมและตรงกับความต้องการของพยาบาลจิตเวช ผู้วิจัยจึงใคร่ขอความร่วมมือจากพยาบาลผู้ผ่านการอบรม "กระบวนการพยาบาลและการบันทึกสู่สากล" ร่วมเรียนผ่านบทเรียนอีเลิร์นนิงซึ่งประกอบไปด้วยบทเรียนย่อยจำนวน 5 บทเรียน โดยท่านสามารถเข้าเรียนบทเรียนได้ตามวันและเวลาที่ท่านสะดวกภายในระยะเวลา 30 วัน และให้ความร่วมมือในการบันทึกเสียงเพื่อทำแบบทดสอบการพูดส่งเวรเป็นภาษาอังกฤษทั้งก่อนและหลังการเรียนผ่านบทเรียนอีเลิร์นนิง รวมทั้งให้ข้อมูลและข้อคิดเห็นของท่านผ่านแบบสอบถามแบบออนไลน์และการสัมภาษณ์แบบการสุ่มสัมภาษณ์

การตัดสินใจเข้าร่วมการวิจัยครั้งนี้ จะเป็นไปตามความสมัครใจของท่าน และไม่ว่าท่านจะเข้าร่วมการวิจัยหรือไม่ จะไม่มีผลกระทบใด ๆ ทั้งต่อตัวท่านและบุคคลที่เกี่ยวข้อง และแม้ท่านจะเข้าร่วมการวิจัยแล้ว ท่านมีสิทธิ์ที่จะบอกเลิกการเข้าร่วมการวิจัยได้ตลอดเวลาที่ท่านต้องการ โดยไม่มีข้อแม้ใด ๆ และผู้วิจัยรับรองว่าจะเก็บข้อมูลเกี่ยวกับท่านเป็นความลับ จะเปิดเผยเฉพาะการสรุปผลการวิจัยโดยไม่มีการระบุชื่อนามสกุล หน่วยงานต่าง ๆ ที่เกี่ยวข้อง และจะกระทำด้วยเหตุผลทางวิชาการเท่านั้น หากท่านมีข้อข้องใจใด ๆ เกี่ยวกับขั้นตอนต่าง ๆ ของงานวิจัยนี้ ท่านสามารถติดต่อกับผู้วิจัย นางสาวเบญญาภา ทำสะดวก ได้โดยตรง

ดิฉันขอขอบพระคุณท่านที่ได้เสียสละเวลา ให้ความร่วมมือในการเข้าร่วมงานวิจัยในครั้งนี้

ผู้วิจัย

<u>สำหรับพยาบาลอาสาสมัครเข้าร่วมการวิจัย</u>

ข้าพเจ้าได้อ่านคำชี้แจงตามรายละเอียดดังกล่าวข้างต้นอย่างครบถ้วน มีความเข้าใจและยินดีที่จะให้ความร่วมมือ

ลงชื่อ ……...…….

พยาบาลผู้กรอกข้อมูล

(……..…….……)

……..…/…..……..…../…..……..

APPENDIX J

Statistical Records on Inpatient Admissions

at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital

2008 - 2013

Year 2013

No.	Description	Male	Female	Total	Percentage
1.	Schizophrenia	806	217	**1,023**	47.54
2.	Mental and behavioural disorder due to use of alcohol	366	26	**329**	18.22
3.	Bipolar affective disorder	110	119	**229**	10.64
4.	Schizoaffective disorder	41	65	**106**	4.93
5.	Depressive episode	22	67	**89**	4.14

Year 2012

No.	Description	Male	Female	Total	Percentage
1.	Schizophrenia	806	217	**1,023**	47.54
2.	Mental and behavioural disorder due to use of alcohol	366	26	**329**	18.22
3.	Bipolar affective disorder	110	119	**229**	10.64
4.	Schizoaffective disorder	41	65	**106**	4.93
5.	Depressive episode	22	67	**89**	4.14

Year 2011

No.	Description	Male	Female	Total	Percentage
1.	Schizophrenia	806	217	**1,023**	47.54
2.	Mental and behavioural disorder due to use of alcohol	366	26	**329**	18.22
3.	Bipolar affective disorder	110	119	**229**	10.64
4.	Schizoaffective disorder	41	65	**106**	4.93
5.	Depressive episode	22	67	**89**	4.14

Year 2010

No.	Description	Male	Female	Total	Percentage
1.	Schizophrenia	882	273	**1,155**	50.04
2.	Mental and behavioural disorder due to use of alcohol	363	26	**389**	16.85
3.	Bipolar affective disorder	107	134	**241**	10.44
4.	Depressive episode	51	88	**139**	6.02
5.	Schizoaffective disorder	37	38	**75**	3.25

Year 2009

No.	Description	Male	Female	Total	Percentage
1.	Schizophrenia	1,095	340	**1,435**	50.69
2.	Mental and behavioural disorder due to use of alcohol	463	34	**497**	17.56
3.	Bipolar affective disorder	127	132	**259**	9.15
4.	Depressive episode	59	111	**170**	6.00
5.	Acute and transient psychotic disorders	56	46	**102**	3.60

Year 2008

No.	Description	Male	Female	Total	Percentage
1.	Schizophrenia	766	253	**1,019**	49.25
2.	Mental and behavioural disorder due to use of alcohol	369	26	**395**	19.09
3.	Bipolar affective disorder	98	100	**198**	9.57
4.	Depressive episode	37	63	**100**	4.83
5.	Acute and transient psychotic disorders	39	34	**73**	3.53

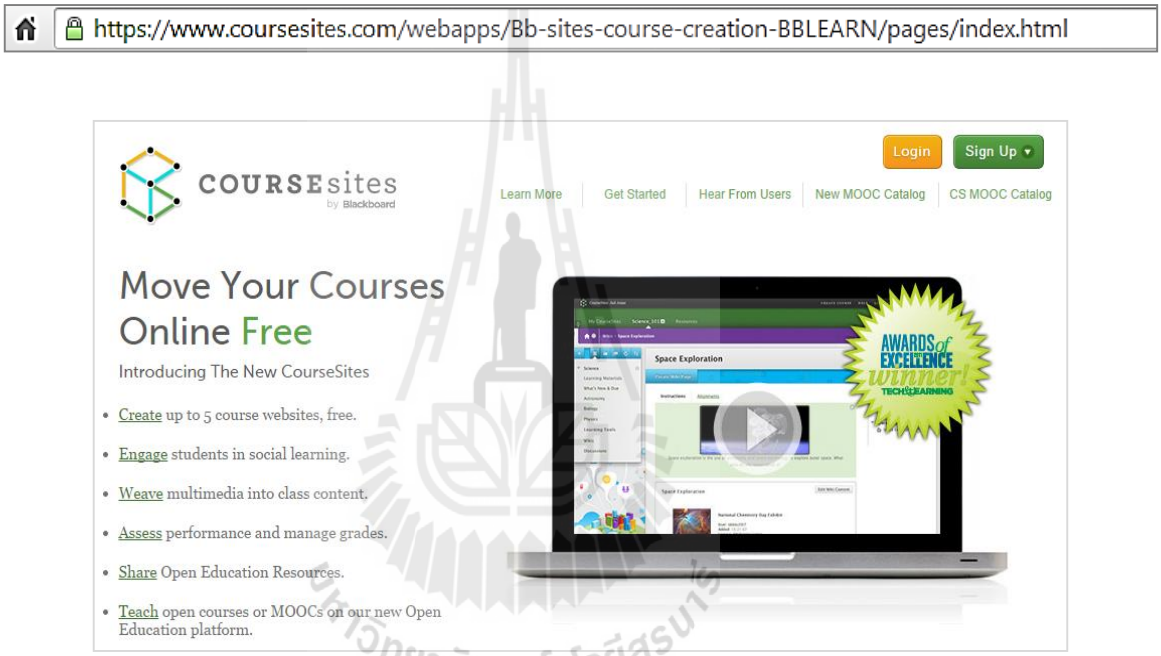
Year 2007

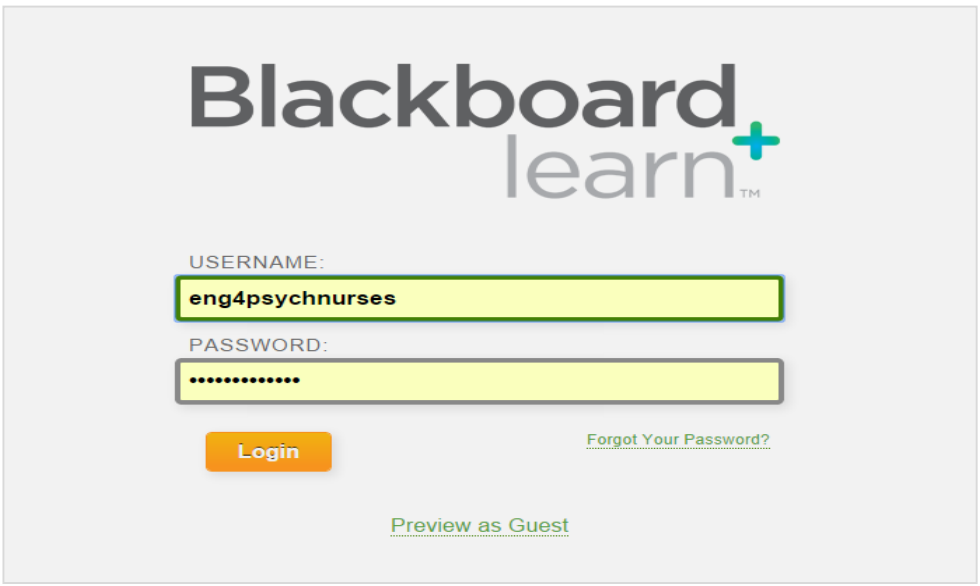
No.	Description	Male	Female	Total	Percentage
1.	Schizophrenia	748	244	992	46.5
2.	Mental and behavioural disorder due to use of alcohol	395	31	426	20
3.	Bipolar affective disorder	73	93	166	7.8
4.	Unspecified nonorganic psychosis	27	67	94	4.4
5.	Depressive episode	51	30	81	3.8

APPENDIX K

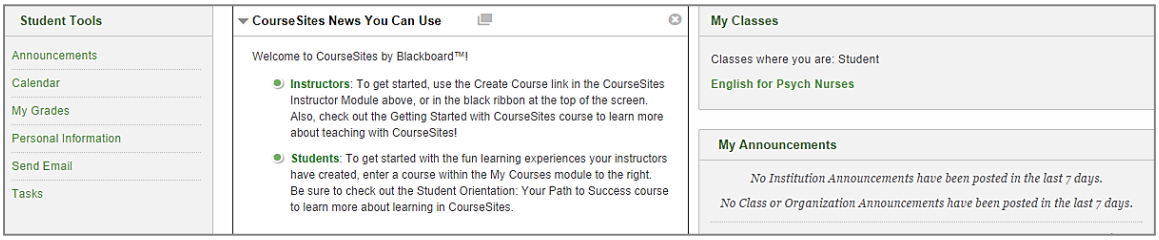
Examples of the EPN Program for the RPNs

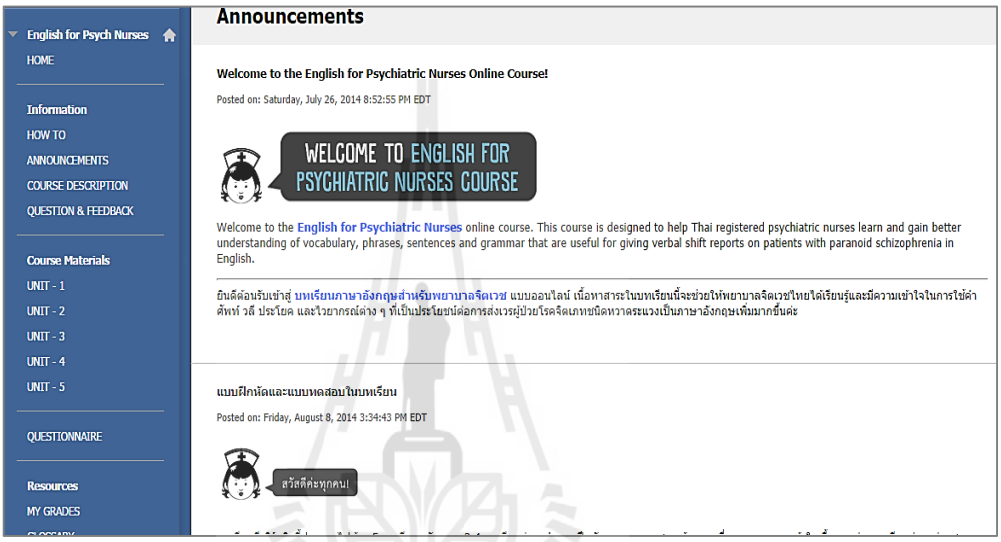
1. Outlook of the CourseSites by Blackboard



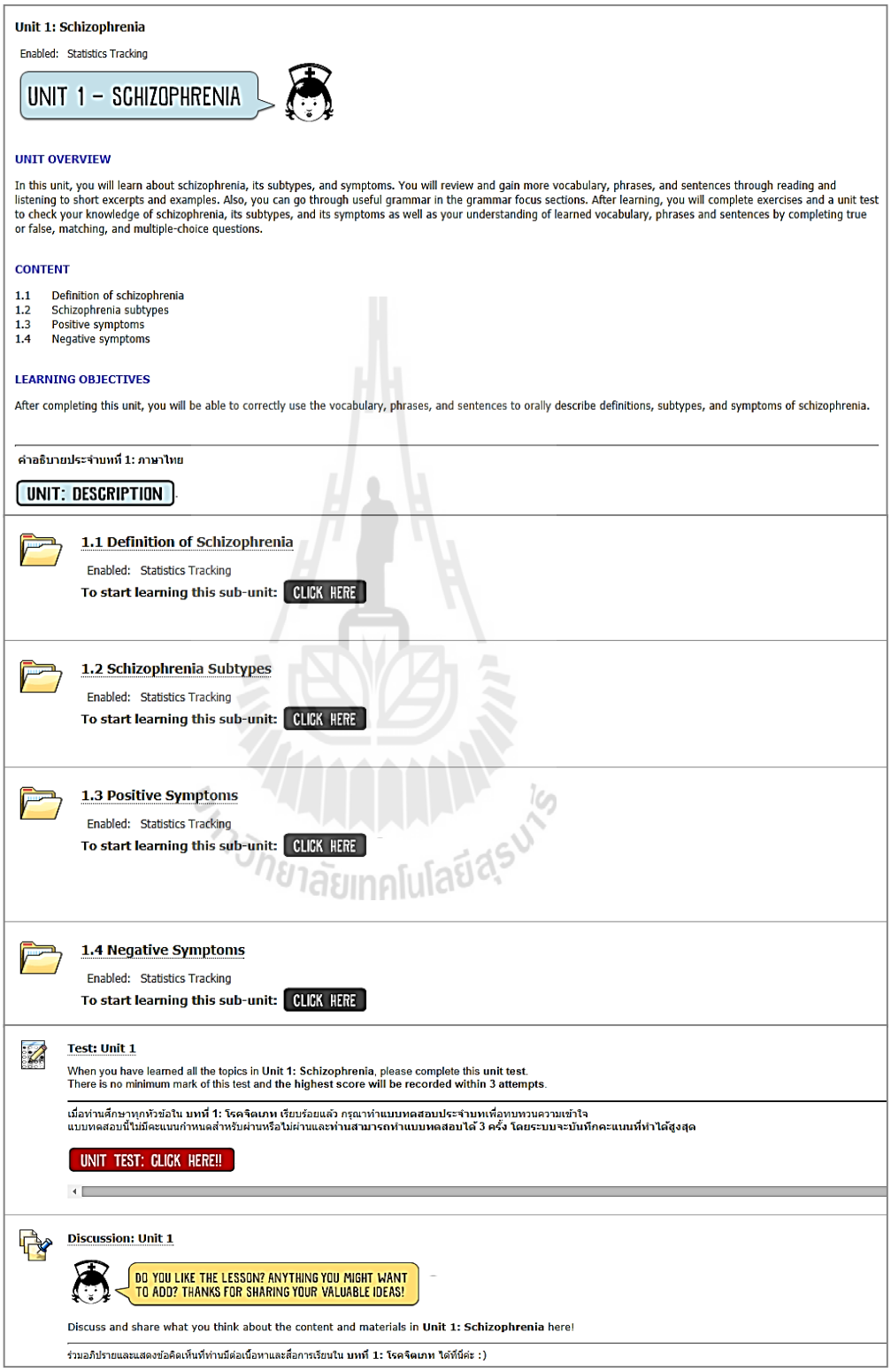


2. The Announcement, How to, and Question & Feedback





3. Overview of each module: Description, Sub-topics, Test, and Discussion forum



Unit 1: Schizophrenia

Enabled: Statistics Tracking

UNIT 1 – SCHIZOPHRENIA

UNIT OVERVIEW

In this unit, you will learn about schizophrenia, its subtypes, and symptoms. You will review and gain more vocabulary, phrases, and sentences through reading and listening to short excerpts and examples. Also, you can go through useful grammar in the grammar focus sections. After learning, you will complete exercises and a unit test to check your knowledge of schizophrenia, its subtypes, and its symptoms as well as your understanding of learned vocabulary, phrases and sentences by completing true or false, matching, and multiple-choice questions.

CONTENT

1.1 Definition of schizophrenia
1.2 Schizophrenia subtypes
1.3 Positive symptoms
1.4 Negative symptoms

LEARNING OBJECTIVES

After completing this unit, you will be able to correctly use the vocabulary, phrases, and sentences to orally describe definitions, subtypes, and symptoms of schizophrenia.

คำอธิบายประจำบทที่ 1: ภาษาไทย

UNIT: DESCRIPTION

1.1 Definition of Schizophrenia

Enabled: Statistics Tracking

To start learning this sub-unit: CLICK HERE

1.2 Schizophrenia Subtypes

Enabled: Statistics Tracking

To start learning this sub-unit: CLICK HERE

1.3 Positive Symptoms

Enabled: Statistics Tracking

To start learning this sub-unit: CLICK HERE

1.4 Negative Symptoms

Enabled: Statistics Tracking

To start learning this sub-unit: CLICK HERE

Test: Unit 1

When you have learned all the topics in **Unit 1: Schizophrenia**, please complete this **unit test**.
There is no minimum mark of this test and **the highest score will be recorded within 3 attempts**.

เมื่อท่านเรียนจบทุกหัวข้อใน **บทที่ 1: โรคจิตเภท** เรียบร้อยแล้ว กรุณาทำแบบทดสอบประจำบทเพื่อทบทวนความเข้าใจ
แบบทดสอบนี้ไม่มีคะแนนกำหนดสำหรับผ่านหรือไม่ผ่านและท่านสามารถทำแบบทดสอบได้ 3 ครั้ง โดยระบบจะบันทึกคะแนนที่ทำได้สูงสุด

UNIT TEST: CLICK HERE!!

Discussion: Unit 1

DO YOU LIKE THE LESSON? ANYTHING YOU MIGHT WANT TO ADD? THANKS FOR SHARING YOUR VALUABLE IDEAS!

Discuss and share what you think about the content and materials in **Unit 1: Schizophrenia** here!

ร่วมอภิปรายและแสดงข้อคิดเห็นที่ท่านมีต่อเนื้อหาและสื่อการเรียนใน **บทที่ 1: โรคจิตเภท** ได้ที่นี่ค่ะ :)

4. Overview of a sub-topic: Navigation, Text & Translation, Audio, and Vocabulary

1.3 Positive Symptoms

Navigation Page

• UNIT • Click the button to go to **Unit 1 - Schizophrenia**

←BACK Click the button to go back to **1.2 Schizophrenia Subtypes**

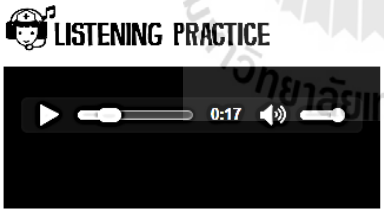
NEXT→ Click the button to go to **1.4 NegativeSymptoms**

Positive Symptoms

Schizophrenia symptoms are divided into two main categories: positive and negative.
The followings are **positive symptoms of schizophrenia.**

POSITIVE SYMPTOMS

SYMPTOM	DEFINITION
1. AMBIVALENCE	Ambivalence means holding contradictory beliefs or feelings about the same person, event, or situation.
2. LOOSE ASSOCIATIONS	Loose associations refer to fragmented or poorly related thoughts and ideas.
3. DELUSIONS	Delusions are fixed false beliefs that have no basis in reality.
4. ECHOPRAXIA	Echopraxia refers to imitation of the movements and gestures of another person whom patients are observing.
5. FLIGHT OF IDEAS	Flight of ideas is a continuous flow of verbalization in which patients jump rapidly from one topic to another.
6. HALLUCINATIONS	Hallucinations are false sensory perceptions or perceptual experiences that do not exist in reality.
7. IDEAS OF REFERENCE	Ideas of reference refer to patients' false belief that external events have special meaning for them.
8. PERSEVERATION	Perseveration is persistent adherence to a single idea or topic, verbal repetition of a sentence, word, or phrase; resisting attempts to change the topic.



ค่าอธิบายภาษาไทย: **อาการด้านบวกของโรคจิตเภท**

CONTENT: THAI VERSION

WORD	MEANING
adherence	การปฏิบัติตาม การยึดมั่น
ambivalence	ความคิดสองจิตสองใจ
attempt	ความพยายาม
basis	หลักพื้นฐาน รากฐาน
belief	ความเชื่อ
contradictory	ซึ่งขัดแย้งกัน ตรงกันข้าม
delusion	อาการหลงผิด

5. Grammar Focus, Sentence Examples, and Exercise Sections

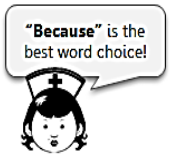
Grammar Focus

GRAMMAR FOCUS

BECAUSE / AS /SINCE

การใช้ Because / As / since เพื่อบอกความเป็นเหตุเป็นผล

We use because / as / since to express cause or reason.
เราใช้ because / as / since ในการอธิบายเหตุผล โดยทั้ง 3 คำนี้สามารถใช้แทนกันได้ แต่การเลือกใช้ because จะดีที่สุด



นอกจากนี้ ในการแต่งประโยคเพื่ออธิบายอาการของโรคจิตเภททั้งในด้านบวกและด้านลบที่กำลังแสดงอยู่ อาจจะใช้รูปแบบประโยคได้ 2 กรณี ดังนี้

1. หากต้องการบอกข้อเท็จจริงว่าผู้ป่วยมีอาการของโรคจิตเภท ทั้งในรูปปัจจุบันและรูปอดีต ใช้...

รูปปัจจุบัน

Subject + **has** + symptom (noun)
Subjects + **have** + symptom (noun)

เช่น...

SENTENCE EXAMPLE

The patient received PRN medications **because** he heard voices telling him to jump off the building.
ผู้ป่วยได้รับยา PRN **เนื่องจาก** เขาได้ยินเสียงมาสั่งให้เขาไปกระโดดตึก

The patient has flight of ideas **as/since** he changed topics from family to politics and hobbies very quickly.
ผู้ป่วยมีความคิดพรั่งพรู **เพราะว่า** เขาเปลี่ยนหัวข้อสนทนาจากคุยเรื่องครอบครัวเป็นคุยเรื่องการเมือง และ งานอดิเรคอย่างรวดเร็วจนผิดปกติ

The patient has delusions **because** she believes another patient is trying to kill her.
ผู้ป่วยมีอาการหลงผิด **เนื่องจาก** เธอเชื่อว่าเพื่อนผู้ป่วยพยายามจะฆ่าเธอ

The patient is having/experiencing hallucinations **as** he hears voices that do not exist.
ผู้ป่วยกำลังมีอาการประสาทหลอน **เพราะว่า** เขาได้ยินเสียงพูดแต่เสียงนั้นๆ ไม่มีอยู่จริง

The patient has echopraxia **since** he imitates or copies another person's gestures.
ผู้ป่วยมีอาการ echopraxia **เพราะว่า** เขาเลียนแบบท่าทางต่าง ๆ ของผู้อื่น

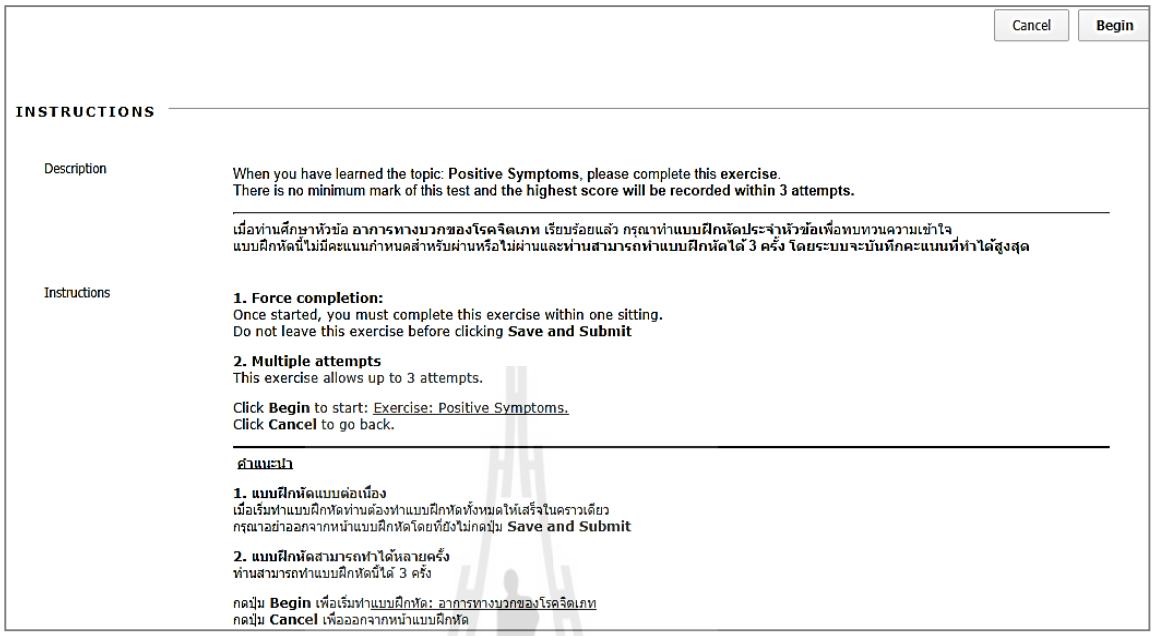
Exercise: Positive Symptoms

When you have learned the topic: **Positive Symptoms**, please complete this exercise.
There is no minimum mark of this test and **the highest score will be recorded within 3 attempts.**

เมื่อท่านศึกษาหัวข้อ อาการทางบวกของโรคจิตเภท เรียบร้อยแล้ว กรุณาทำแบบฝึกหัดประจำหัวข้อเพื่อทบทวนความเข้าใจ
แบบฝึกหัดนี้ไม่มีคะแนนกำหนดสำหรับผ่านหรือไม่ผ่านและท่านสามารถทำแบบฝึกหัดได้ 3 ครั้ง โดยระบบจะบันทึกคะแนนที่ทำได้สูงสุด

EXERCISE: CLICK HERE!!

6. Exercise/Test Instruction and Types of Tests



Cancel Begin

INSTRUCTIONS

Description

When you have learned the topic: **Positive Symptoms**, please complete **this exercise**.
There is no minimum mark of this test and the highest score will be recorded within 3 attempts.

เมื่อท่านศึกษาหัวข้อ **อาการทางบวกของโรคจิตเภท** เรียบร้อยแล้ว กรุณาทำ**แบบฝึกหัดประจำหัวข้อ**เพื่อทบทวนความเข้าใจ
แบบฝึกหัดนี้ไม่มีคะแนนกำหนดสำหรับผ่านหรือไม่ผ่านและ**ท่านสามารถทำแบบฝึกหัดได้ 3 ครั้ง โดยระบบจะบันทึกคะแนนที่ทำได้สูงสุด**

Instructions

1. Force completion:
Once started, you must complete this exercise within one sitting.
Do not leave this exercise before clicking **Save and Submit**

2. Multiple attempts
This exercise allows up to 3 attempts.

Click **Begin** to start: Exercise: Positive Symptoms.
Click **Cancel** to go back.

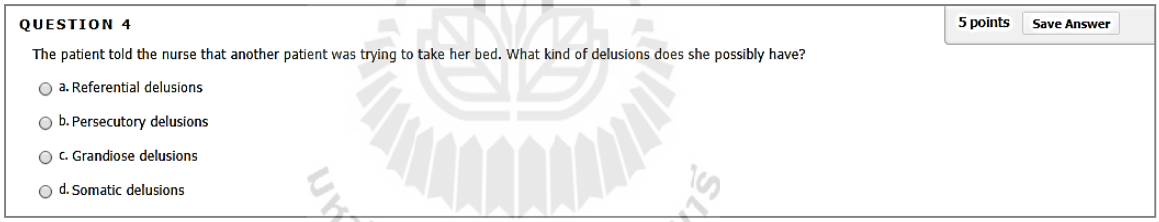
คำแนะนำ

1. แบบฝึกหัดแบบต่อเนื่อง
เมื่อเริ่มทำแบบฝึกหัดท่านต้องทำแบบฝึกหัดทั้งหมดให้เสร็จในคราวเดียว
กรุณาอย่าออกจากหน้าแบบฝึกหัดโดยที่ยังไม่กดปุ่ม **Save and Submit**

2. แบบฝึกหัดสามารถทำได้หลายครั้ง
ท่านสามารถทำแบบฝึกหัดนี้ได้ 3 ครั้ง

กดปุ่ม **Begin** เพื่อเริ่มทำแบบฝึกหัด: อาการทางบวกของโรคจิตเภท
กดปุ่ม **Cancel** เพื่อออกจากหน้าแบบฝึกหัด

Multiple-Choice

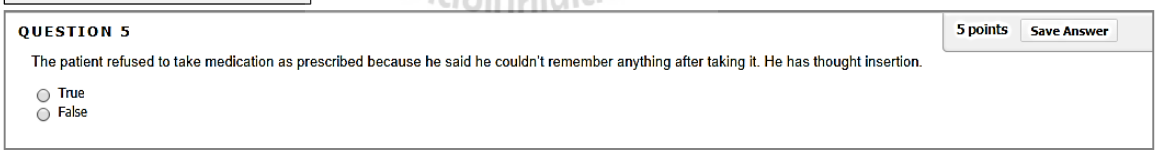


QUESTION 4 — 5 points — Save Answer

The patient told the nurse that another patient was trying to take her bed. What kind of delusions does she possibly have?

- a. Referential delusions
- b. Persecutory delusions
- c. Grandiose delusions
- d. Somatic delusions

True or false Item

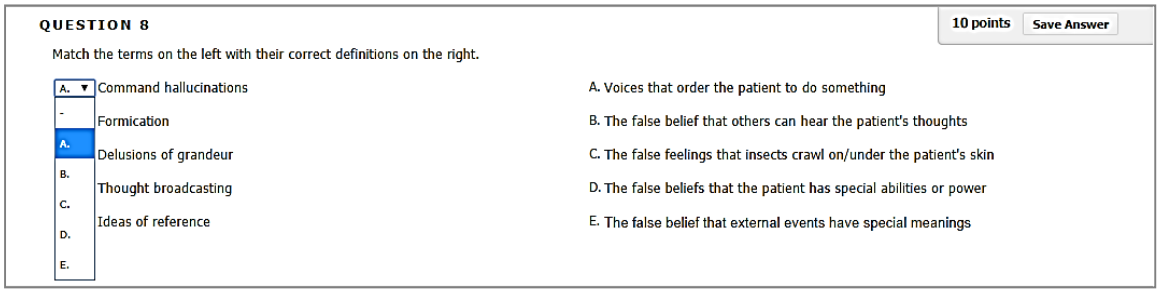


QUESTION 5 — 5 points — Save Answer

The patient refused to take medication as prescribed because he said he couldn't remember anything after taking it. He has thought insertion.

- True
- False

matching Item



QUESTION 8 — 10 points — Save Answer

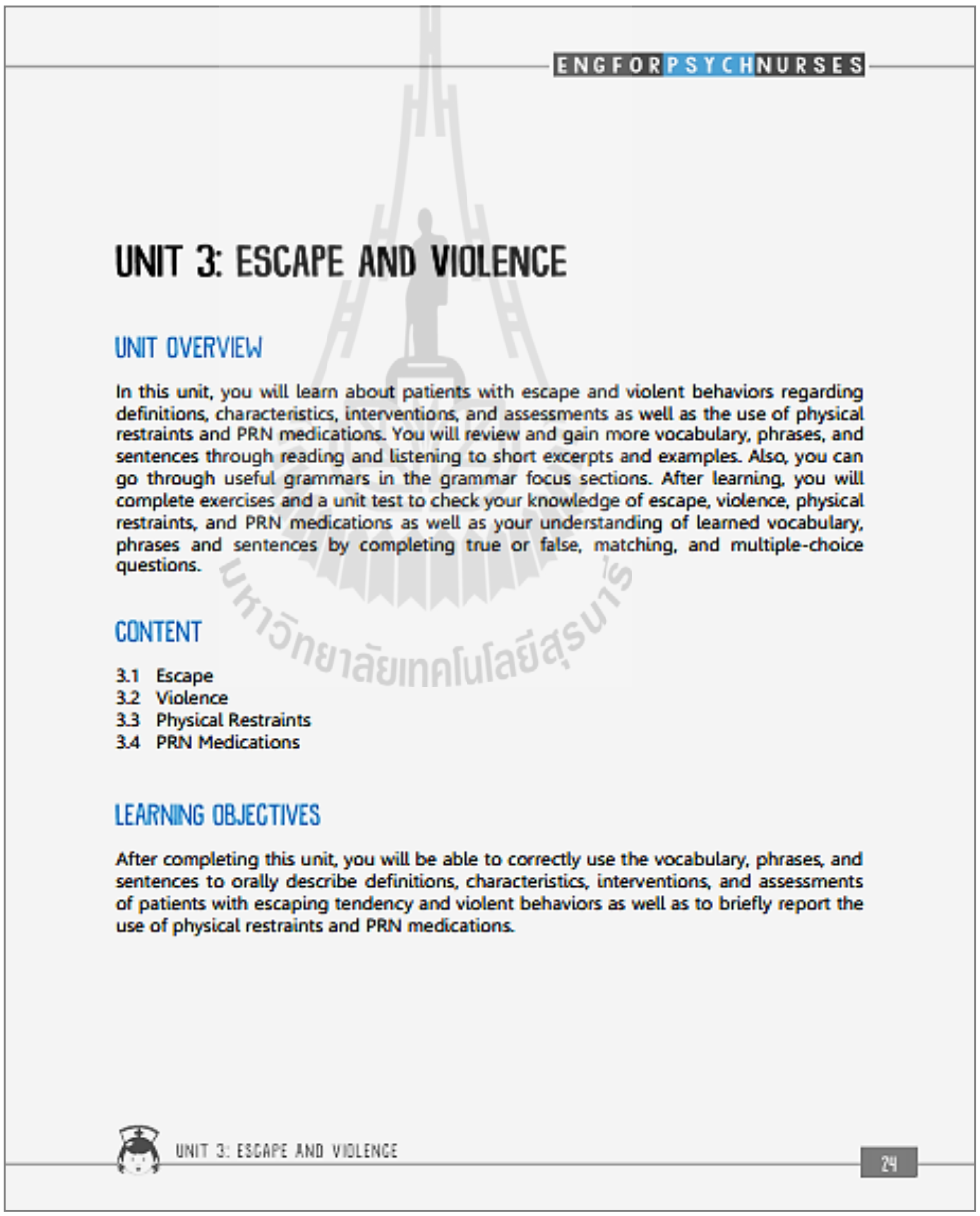
Match the terms on the left with their correct definitions on the right.

A. ▼ Command hallucinations		A. Voices that order the patient to do something
- / A. / B. / C. / D. / E. Formication		B. The false belief that others can hear the patient's thoughts
Delusions of grandeur		C. The false feelings that insects crawl on/under the patient's skin
Thought broadcasting		D. The false beliefs that the patient has special abilities or power
Ideas of reference		E. The false belief that external events have special meanings

APPENDIX L

Examples of the English for the RPNs Textbook

1. The overview, content, and objectives



UNIT 3: ESCAPE AND VIOLENCE

UNIT OVERVIEW

In this unit, you will learn about patients with escape and violent behaviors regarding definitions, characteristics, interventions, and assessments as well as the use of physical restraints and PRN medications. You will review and gain more vocabulary, phrases, and sentences through reading and listening to short excerpts and examples. Also, you can go through useful grammars in the grammar focus sections. After learning, you will complete exercises and a unit test to check your knowledge of escape, violence, physical restraints, and PRN medications as well as your understanding of learned vocabulary, phrases and sentences by completing true or false, matching, and multiple-choice questions.

CONTENT

3.1 Escape
3.2 Violence
3.3 Physical Restraints
3.4 PRN Medications

LEARNING OBJECTIVES

After completing this unit, you will be able to correctly use the vocabulary, phrases, and sentences to orally describe definitions, characteristics, interventions, and assessments of patients with escaping tendency and violent behaviors as well as to briefly report the use of physical restraints and PRN medications.

2. Content section

3.2 VIOLENCE

Patients with schizophrenia may experience severe changes in mood, thoughts, or behaviors. Nurses must first determine whether or not the patient is a threat to self or to others.

THREAT TO SELF

The threat to self includes the patient's inability to care for himself/herself (self-neglect) or the patient's suicidal behavior (self-harm or self-mutilation).

THREAT TO OTHERS

The threat to others includes the patient's agitation, aggression, hostility, and violence.

WORD	DEFINITION
AGGRESSION	Aggression refers to any behaviors that can result in both physical and psychological harm to oneself, others or objects.
AGITATION	Agitation is a feeling of aggravation or restlessness caused by provocation or a medical condition.
HOSTILITY	Hostility is an act of aggression stemming from feelings of anger.
VIOLENCE	Violence refers to the intention to cause harm, injury, maldevelopment, or death to oneself or others.

CAUSES AND FACTORS FOR VIOLENCE

Violent patients are often psychotic and have diagnoses like polysubstance abuse, schizophrenia, delusional disorder, or acute mania. A prior history of violence or aggression is a strong predictor of future episodes.

HIGH RISK PATIENTS WITH VIOLENT BEHAVIORS

High risk patients are patients who have a history of weapon possessions or those who show signs of aggression and hostility. This also includes patients who have severe psychosis which they fail to control themselves, for example, they may have harmed other persons or objects before being taken to a mental health hospital.

Patients with violence precautions are patients who have acted out violently or those who have a history of using violence.

3. Vocabulary section

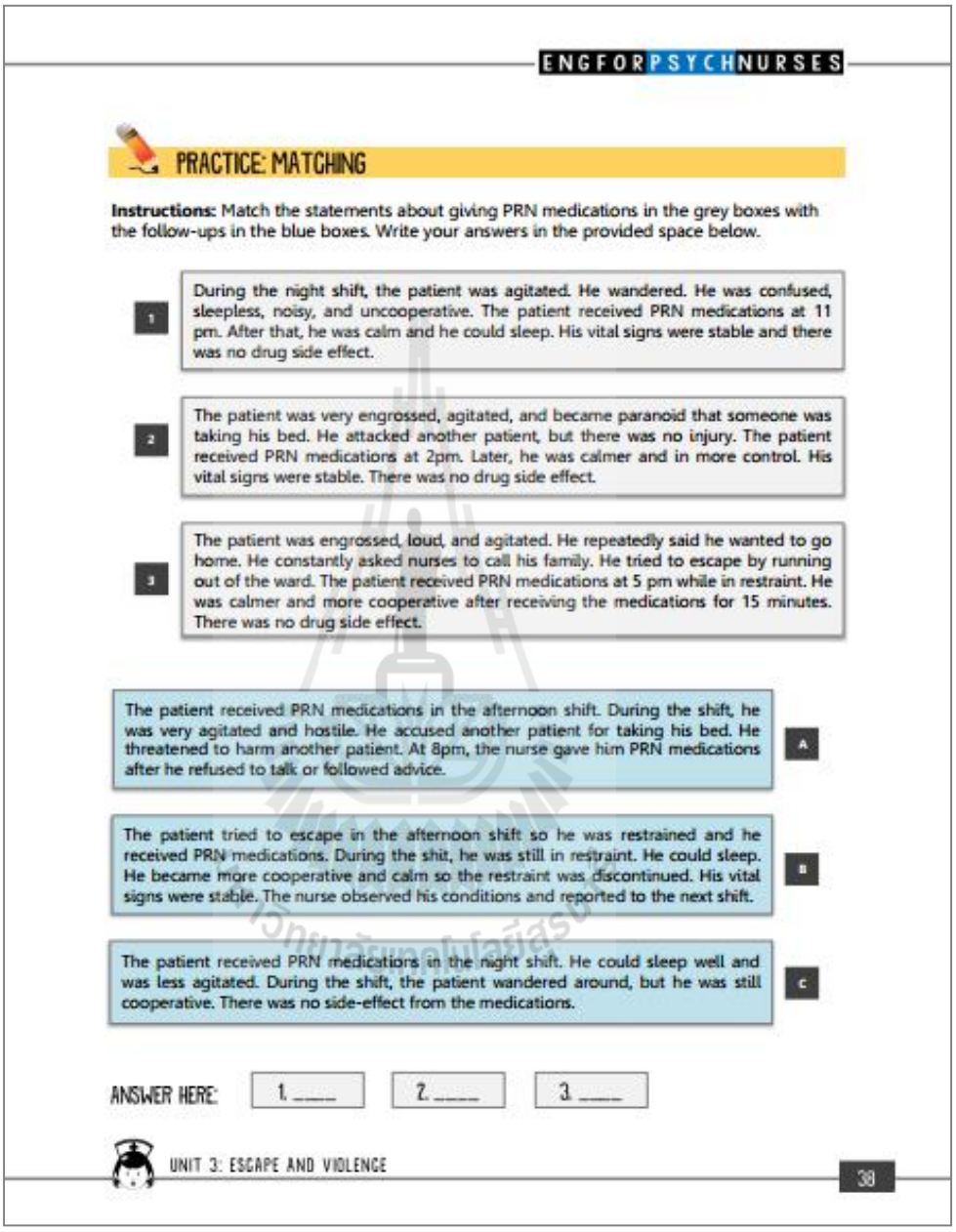
NURSING INTERVENTIONS

For patient safety, nurses should frequently observe, assess, and evaluate the patient's conditions by making sure that his/her vital signs are stable and there is no side-effect. If there is any of the side-effects, advice the patient what to do and provide appropriate cares and treatments. If the side-effects become serious, report the physician. Ensure the patient can eat, sleep, take medicines, and take care of his/her self-care activities. Hand down important information that nurses in the next shift need to know in order to plan proper cares and interventions.

VOCABULARY

WORD	MEANING	WORD	MEANING
abbreviation		noxious	
adverse drug reactions		orthostatic	
alert		overdose	
administer		occurrence	
antipsychotic		partially	
atypical		photosensitivity	
akathisia		pose	
abnormal		prophylaxis	
accumulation		purposely	
burning		prolong	
blurred vision		reassure	
comfort		relief	
completely		restless	
constipation		sedation	
distress		seizure	
dry mouth		self-care	
dystonic reaction		sharpness	
effectiveness		stroke	
ensure		slurred speech	
epileptic		sensitivity	
failure		sub-acute	
frequency		short-lived	
frightened		typical	
hand down		tardive dyskinesia	
hypotension		tonic contraction	
improvement		tremor	
involuntary		urinary retention	
latent		unintended	
life-threatening		unrelieved	
onset		weight gain	
neurological		xerostomia	

4. Exercises



ENGFORPSYCHNURSES

PRACTICE: MATCHING

Instructions: Match the statements about giving PRN medications in the grey boxes with the follow-ups in the blue boxes. Write your answers in the provided space below.

1. During the night shift, the patient was agitated. He wandered. He was confused, sleepless, noisy, and uncooperative. The patient received PRN medications at 11 pm. After that, he was calm and he could sleep. His vital signs were stable and there was no drug side effect.

2. The patient was very engrossed, agitated, and became paranoid that someone was taking his bed. He attacked another patient, but there was no injury. The patient received PRN medications at 2pm. Later, he was calmer and in more control. His vital signs were stable. There was no drug side effect.

3. The patient was engrossed, loud, and agitated. He repeatedly said he wanted to go home. He constantly asked nurses to call his family. He tried to escape by running out of the ward. The patient received PRN medications at 5 pm while in restraint. He was calmer and more cooperative after receiving the medications for 15 minutes. There was no drug side effect.

A. The patient received PRN medications in the afternoon shift. During the shift, he was very agitated and hostile. He accused another patient for taking his bed. He threatened to harm another patient. At 8pm, the nurse gave him PRN medications after he refused to talk or followed advice.

B. The patient tried to escape in the afternoon shift so he was restrained and he received PRN medications. During the shit, he was still in restraint. He could sleep. He became more cooperative and calm so the restraint was discontinued. His vital signs were stable. The nurse observed his conditions and reported to the next shift.

C. The patient received PRN medications in the night shift. He could sleep well and was less agitated. During the shift, the patient wandered around, but he was still cooperative. There was no side-effect from the medications.

ANSWER HERE: 1. ____ 2. ____ 3. ____

UNIT 3: ESCAPE AND VIOLENCE 38

5. Example of Shift Report Form 1 (Summary)

NURSING SHIFT REPORT FORM (A)

DATE: 15 MAY 2014 SHIFT: MORNING
WARD: PHIRUNTHONG

TOTAL NUMBER OF PATIENTS:

TOTAL PATIENTS (PREVIOUS SHIFT)	50	CASES
ADMISSION	2	CASES
TRANSFER	4	CASES
REFERRAL	-	CASES
DISCHARGE	-	CASES
TOTAL PATIENTS (CURRENT SHIFT)	48	CASES

TYPE OF PAYMENT:
- GOVERNMENT
- NATIONAL HEALTH SECURITY OFFICE (NHSO), THAILAND
- SOCIAL SECURITY OFFICE
- OTHER

LEVEL OF ILLNESS:

ACUTE PHASE I	48	CASES
ACUTE PHASE II	-	CASES
SUB-ACUTE	-	CASES

SPECIAL PRECAUTION:			PATIENTS' NAMES
SUICIDE	4	CASES	JAMES, ALEX, TIM, JOHN
ACCIDENT	-	CASES	
VIOLENCE	3	CASES	LUKE, SAM, ERIC
ESCAPE	2	CASES	TYLER, RICK

SPECIAL TREATMENT:			PATIENTS' NAMES
ECT	-	CASES	
DENTAL CLINIC	-	CASES	
SOCIAL WORKER'S CLINIC	2	CASES	PAUL, PETER
FOLLOW UP (MAHARAJ HOSPITAL)	-	CASES	
HOME VISIT	-	CASES	

SPECIAL DIET: FOOD FOR DIABETES (2), LOW-SODIUM DIET (2)
SPECIAL NOTE: IV FLUIDS (2), RESTRAINTS (4), PRN MEDICATIONS (5)

Good afternoon. I am Nurse Gina Jones. I worked on the morning shift at Phirunthong ward on 15 of May.

There were 26 patients on the previous shift. We admitted 3 so there are 29 patients in this shift.

All of them are in acute phase I. Nine patients are on special precautions. Four patients (James, Alex, Tim, and John) are on suicide, 3 (Luke, Sam, and Eric) on violence, and 2 (Tyler and Rick) on escape.

Only 2 patients (Paul and Peter) were scheduled to visit a social worker's clinic. On the shift, we administered IV fluids to 2 patients, PRN medications to 5 patients, and gave restraints to 4 patients. Two patients require foods for diabetes and 2 need low-sodium diet. Thank you and I wish you a wonderful afternoon!

6. Example of Shift Report Form 2 (Individual)

NURSING SHIFT REPORT FORM (B)

CASE:	02				
NAME:	ROYCE ADAMS	AGE:	42	GENDER:	MALE
DIAGNOSIS:	SCHIZOPHRENIA, PARANOID TYPE				
DATE OF ADMISSION:	22 JULY 2014	NEW ADMISSION:		READMISSION:	✓
TRANSFERRED FROM:	-				
PRIMARY DOCTOR:	DR. GERALD SMITH				
PRIMARY NURSE:	MS. GINA JONES				
CONSULTS:	-				
PRECAUTION:	VIOLENCE				

NURSING DIAGNOSIS & SIGN AND SYMPTOM	TREATMENT AND CARE	EVALUATION
Risk for other-directed violence and property damage S: The patient said "Other patients are persecuting and threatening to hurt me. Nurses locked me in. They did not let me out. I am not sick. I don't know why they must lock me up. I don't trust anyone in here. People are always out to get me." O: The patient was preoccupied and hostile. He talked nonsense. He did not sleep at night. He became fidgety, irritated, and uncontrollable. He talked aloud and verbally attacked others. He aggressively punched his bed. He has a history of frequently quarreling with his neighbors and chasing people off using a wooden stick when they walk past his house. He always damage objects whenever his relatives fail to meet his needs.	1. Establish a relationship to gain patient trust 2. Assess the patient 3. Give physical restraints and administer a PRN medication 4. Take vital signs and observe changes in conditions 5. Provide prop environment - impleme observat - keep po dangero weapon - reduce 6. Give advice support the 7. Follow pres 8. Ensure the medication observe fo 9. Observe a important	The patient: - became better after receiving a PRN medication as his psychotic symptoms were reduced - communicated better

Mr. Royce Adams, 42 years old, diagnosed with paranoid schizophrenia was readmitted on July 22nd. He is under the care of Dr. Gerald Smith and Nurse Gina Jones. He is on violence precautions.

The patient was at risk for other-directed violence and property damage. He told the nurse that other patients were planning to harm him. He said nurses also persecuted him by locking him in. He claimed that he was not sick and we should not keep him inside. He did not trust anyone because everybody was out to get him. We noticed that the patient was aloof and hostile. He talked nonsense. He did not sleep and became irritated, fidgety, uncontrollable, and loud. He attacked other patients verbally and he punched his bed many times. We found that he has a history of violence. He has problems with his neighbors and he uses wooden stick to chase off people who walk past his house. He destroys or damages household objects when he does not get what he wants.

For treatment and care for this case, we establish a relationship to gain his trust and assessed him. The patient acted out so he was restrained and received PRN medication. We took vital signs and observed his conditions and side effects. We provided proper and safe environments for him by implementing close observation, keeping dangerous objects or weapons away, and reducing stimulation that might trigger his violent behaviors. We made sure we gave him advice and told him what we were doing for him. We also made sure that he took medication and we followed prescribed plan of care.

We evaluated that the patient's psychotic symptoms were reduced after physical restraints and a PRN medication were given and administered. He could communicate better and became more cooperative. His vital signs were stable. There was neither complication nor injury once physical restraints were discontinued.

7. Example of Exercise / Test

A: MULTIPLE-CHOICE ITEMS

Instructions: Read the following questions and select the most appropriate answer.

1. Some patients have low .....because they do not believe they are good enough to do anything successfully..
   a. self-care
   b. self-harm
   c. self-esteem
   d. self-neglect

2. Patients with moderate to severe depression may experience a change in sleep pattern. In most cases, patients may have ..... or they cannot sleep.
   a. oversleeping
   b. hypersomnia
   c. insomnia
   d. remorse

B: TRUE OR FALSE

Instructions: Read the following statements. Write (True) if the statement is correct and (False) if the statement is not correct.

1.	Patients who are at risk for suicide need one-to-one observations.	
2.	Patients who say they want to stay longer in a hospital are at risk for escape.	
3.	Nurses should keep sharp objects away from patients who are on violence precautions or else they will harm themselves.	

C: MATCHING

Instruction: Match the statements in the right column with the terms in the left column.

1. AKATHISIA	A	A neurological disorder affecting movements of the face/jaw
2. PRN MEDICATIONS	B	The use of devices to restrict moments of the patient
3. PHYSICAL RESTRAINTS	C	The unintended and noxious medication reactions
4. TARDIVE DYSKINESIA	D	A state of agitation, distress, and restlessness
5. DRUG ADVERSE REACTIONS	E	The medications prescribed as needed to treat acute symptoms

APPENDIX M

List of Experts

List of Experts

Name	Position	Instruments Examined
1. Dr. Suksan Suppasetseree, PhD.	Lecturer at School of Foreign Languages, Institute of Social Technology, Suranaree University of Technology, Nakhon Ratchasima	- The Modified ISD Model - Lesson plans - EPN module - Questionnaire - Interview question
2. Dr. Chingchai Methaphat, PhD, MPH. Sociocultural anthropologist,	Lecturer at Department of Health Education, Faculty of Public Health, Burapha University, Chonburi	- Lesson plans - Questionnaire - Interview question
3. Dr. Oratai Sangournpak, PhD, Registered Nurse, Senior Professional Level	Lecturer at Boromarajonani Nursing College, Praputthabat, Saraburi	- Lesson plans - Scoring rubric - Rater for the oral tests
4. Ms. Nittaya Settajan Registered Nurse, Senior Professional Level	Director of Nursing Division at Nakhon Ratchasima Rajanagarindra Psychiatric Hospital, Nakhon Ratchasima	- Lesson plans - Scoring rubric - Questionnaire - Interview question - Rater for the oral tests
5. Ms. Chanachita Pattasena	*Head of Information Technology Department at Saint Mary's Business Administration Technological College, Nakhon Ratchasima*	- *EPN module*