SELF-DIRECTEDNESS AND ACADEMIC SUCCESS OF STUDENTS ENROLLING IN HYBRID AND TRADITIONAL COURSES

By

PANIDA SUKSEEMUANG

Bachelor of Arts in English

Prince of Songkla University
Pattani, Thailand
1988

Master of Arts in Linguistics
Chulalongkong University
Bangkok, Thailand
1993

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF EDUCATION
July, 2009

SELF-DIRECTEDNESS AND ACADEMIC SUCCESS

OF STUDENTS ENROLLING IN HYBRID

AND TRADITIONAL COURSES

Dissertation Approved:

Dr. Adrienne E. Hyle

Dissertation Adviser

Dr. Edward Harris

Dr. Kenneth Stern

Dr. Kay Bull

Dr. A. Gordon Emslie

Dean of the Graduate College

ACKNOWLEDGMENTS

With the vision of the former President of Prince Songkla University, the Thai cohort program has been established. Twelve instructors had left Thailand to begin the first term in Stillwater, Oklahoma. Traveling back and forth to Thailand makes me stronger and copes with my work and my life.

Dr. Prasert Chitapong, thank you for creating this program for us. I can learn not only new knowledge but also new experiences and hospitality of OSU professors, staff and people in Stillwater.

Dr. Adrienne Hyle, thank you for establishing this program. Moreover, I feel very deeply gratitude to you to be my adviser. The way you work, the way you treat your students and advisees and the way you teach impress me a lot. You are my role model. Without your help, your advice and your caring, I cannot reach my goal.

The selection of my committee was with purpose. I know to be successful if I recruit a committee of excellence. Dr. Kay Bull, thank for serving as an outside member after your retirement. Dr. Ed. Harris, thank for serving as a committee. I have a great deal of respect for you. And Dr. Kenneth Stern, thank for your help, your support and your suggestions. You have honored me by serving on my committee.

There are many people who I'd like to express my gratitude. I can achieve my goal because of the help and support from these people:

- Dr. James and Ann Halligan
- Dr. Kathleen Castle
- Dr. Kathleen Kelsey
- Dr. & Mrs. Celil Drugger
- Vallory Vencil
- Nani Idrus
- My former Dean of the faculty of Liberal Arts, Dr. Sujitra Jonlajit
- My former Head of the Department of Languages and Linguistics, Umpairat Sudhinot.
- Wilailuck Preechapanich
- And other people who contributed to this program.

With my family support, my mother, my father, my sisters, my husband and my son, thank you for their love, support, help and encouragement they give me when I feel very tired.

TABLE OF CONTENTS

Chapter Page

I. INTRODUCTION 1

Problem Statement 5
Purpose of the Study 6
Conceptual Framework 7
Procedures 9
Researcher 9
Data Needs 10
Participants 10
Data Collection 11
Data Analysis 13
Significance of the Study 13
Summary 15
Reporting 15

II. REVIEW OF LITERATURE 16

Teacher-and Learner-Centered Instruction 16
Self-Directed Learning 21
Defining SDL 22
SDL Assessment 24
Online Teaching and Learning 27
Instructor Role in Online Learning 28
Learner Characteristics 30
Student Success 31
Andragogy and Pedagogy 32
Andragogy and Pedagogy Research 36

Chapter Page

Summary 38

III. METHODOLOGY 40

Setting 41
Conceptual Framework 42
Data Needs and Sources 43
Data Collection 43
Instructor Participants 44
Student Participants 46
Instrumentation 47
Data Collection 49
Focus Group Interview 52
Course Materials 53
Frequency of Using Virtual Classroom (VCR) 54
Data Analysis 54
Summary 55

IV. PRESENTATION OF THE DATA 57

Overviews of the National Act and Education Management in PSU 57
Faculty Perspectives 59
Demographic Information 59
Types of Courses 59
Opinions on the Most Important Things in Learning and Teaching 61
Class Observation 63
Student Perspectives 67
Student Demographics 68
Student Responses 68
Focus Group Interviews 72
Realities for Success 73
Learner Factors 74
Teacher Factors 77
Academic Success 79
Coursework Type and Benefits 79
Hybrid Course Benefits 79
Traditional Course Benefits 80
Benefits from Both Hybrid and Traditional Courses 82

Chapter Page

Learners Characteristics....83
Positive Attitude to the Course and the Instructors....83
Self-Control....83
Concentration in Learning....83
Self-Prepared for the Future....84
Differences by Academic Faculty....84
The Tendency of Having Hybrid Course....85
Instructional Strategies....85
Summary....86

V. ANALYSIS OF THE DATA....88

Course Design Preferences....88
Factors Impacting Student Success....93
Instructional Style....94
Andragogy and Pedagogy....96
Summary....99

VI. SUMMARY, FINDINGS, CONCLUSIONS, FUTURE RESEARCH, AND FINAL STATEMENT....101

Summary of the Study....102
Purpose of the Study....102
Procedures....103
Findings....104
Research Question One....105
Research Question Two....105
Research Question Three....106
Research Question Four....106
Research Question Five....108
Research Question Six....111
Conclusions and Implications....112
Research Methods....113
Self-Directedness and Academic Success....114
Theory....115
Future Research....116
Final Statement....117

Chapter Page

REFERENCES 118

APPENDICES 129
Appendix A- Oklahoma State University Institutional Review Board.....130
Appendix B- Informed Consent Form 131
Appendix C- Letter of Permission from the Questionnaire's Owner 135
Appendix D- Frequency Count for Each Item in Student Survey 138
Appendix E- Instructor Survey 142
Appendix F- Student Survey.....145
Appendix G- Focus Group Interview Questions 153
Appendix H- Observational Checklist 154

LIST OF TABLES

Table Page

1. The Two Philosophies of Adult Education 18
2. Dimensions upon which Student-Centered and Instructor-Centered Methods May Differ 19
3. The Stages of Self-Directed Learning Model 23
4. The Difference between Pedagogy and Andragogy 35
5. Clusters of Faculty (College) 45
6. Opinions about the Most Important Things in Learning and Teaching 62
7. Comparison of Respondent Scores with Self-Directed Learning Readiness Scales (SDLRS) Interpretation Guidelines 71
8. Participant Demographics 72
9. Length of Time and Types of Courses 85
10. Comparison of Self-Directed of Students Preferring Traditional and Hybrid Courses with SDLRS Interpretation Guidelines 89
11. Scores of Participants who Preferred Hybrid and Traditional Courses 90
12. Descriptive Statistics of Students in Different Years 91
13. Analysis of Variance for the Year of the Students 92

LIST OF FIGURES

Figure Page

1. Level of Learner Dependency.....21

CHAPTER I

INTRODUCTION

The term self-directed learning suggests that a person is able to direct his/her own learning activities with some control over his/her actions and behaviors. Ryan (1999) asserts that "the academic contexts in which self-directed learning occurs have been described in terms of a continuum which extends from formal teacher-oriented learning to completely learner-directed" (p. 5). Moreover, the information age with its growing developments has tremendously affected education in general and higher education specifically in that learning becomes an ongoing process. The number of learners is increasing quickly and the need for flexible learning is demanded. Together with these changes, new teaching pedagogies have been developed, for example, student-centered learning, collaborative learning, constructivism and teachers as facilitators in learning (Lowerison, Sclater, Schmid, & Abrami, 2004).

In addition, it appears to be widely accepted that computers and information technologies have the potential to transform the nature of teaching and learning in higher education (Pascarella & Terenzini, 2005). Web-based instruction offers many advantages. For example, it allows instructors to capture class activities containing both process and products, and enables access to course content whenever they want. Also, web-based instruction expands opportunities for students to study through the use of asynchronous

communication tools and it supports students to contribute to the course because it is easily accessible and amenable to all timetables. The web-base teaching encourages active learning through the use of in-time-learning resources and promotes multiple forms of interactions (Dabbagh, 2002). Research has shown that students enrolling in online courses indicate an increase in independent self-directed learning Lynch (2001). Online students are active learners, and enthusiastic. Their performance is better than traditional students (Suanpang & Petocz, 2006).

The addition of technology to traditional pedagogy has created the new learning environment which was computer-based and open-ended (Hartley & Bendixen 2001; Richard 2004) and the learning model has changed from subject-oriented learning to student-oriented learning (Moore, 2005). Moore (2005) proposes that the goal of the traditional learning model is to master the subject matter at hand and emphasizes accumulating information, content, skills, facts and concepts. However, the learners in the new learning environment of today are active and engaged in learning and they need more flexibility.

Apparently, it seems that pedagogy and teaching philosophy do not support this new learning environment. Knowles (1980) claims that pedagogy's philosophy ignores what students bring into class. Students are assumed to know little and the teaching is predicted upon the concept of dependency. Knowles (1977) contended that the andragogical teaching paradigm assumed the relationship between the teacher and student was similar to that of traveler guide. The students know their destination and have prior experiences in traveling. The teacher provides directions and allows students to make use of their experiences and seeks new information. The ultimate goal of andragogy was to

develop human capable of adaptation, free inquiry, and self-sufficiency. So, in the new learning environment learners can control their own pace of learning, what they want to learn and their goals of learning. Moreover, Oddi (1987) maintained "the ability to be self-directed learner is a requirement for adults in a rapid-changing, technologically-complex society" (p. 21). In addition, Kerr, Rynearson and Kerr (2006) asserted the characteristics of the successful students in a highly technologically driven learning environment such as the online classroom are self-directed, independent, and personally responsible of their own learning, having self competence, proficient reading and writing skills, time management skills and motivation to learn.

Thailand is in the process of a shifting teaching paradigm. According to the 1999 National Education Act (NEA), the key aspects of the reform focus on improving efficiency and effective learning. Students have been encouraged to become critical and creative thinkers, to develop facility with aspects of information technologies, and to develop their learning and individual potential based on the philosophy of student-centered learning. The teacher roles also have changed from the ones who give lectures to facilitators, ones who help and facilitate the students to learn according to the students' interest and pace of learning (Office of the Education Council, 2001). Moreover, the government has developed Thailand Cyber University to promote and provide e-learning courses to the people with the purpose of providing the opportunity for the people to study in higher education and to create an e-learning community. This university is only in the initial phase of development and there are only some online training courses currently available. Educators and the computer technologists are working with lecturers to offer more online courses.

Prince of Songkla University is complying with the direction of the global and national directions. The university is changing and adapting to catch up with global and technological trends. The university's missions are as follows:

> To build up students' repertoire of knowledge based on local issues, which will be subsequently liked to the global network.
>
> To integrate and apply knowledge based on practical experiences to teaching so that students will be exposed to the real world and will be equipped with global competence.
>
> To be a university of the future, opening its doors and making itself more accessible to the people from all walks of life. (Prince of Songkla University Vision and Mission, 2007)

The university aims that the graduates should have curriculum specific intellectual and skills. In addition, they should possess critical thinking, problem solving and communication skills and should have societal responsibility. In this way, the university intends to produce graduates who have not only content but also social concern and life-long learning.

In support of NEA, Prince of Songkla University has put much stress on autonomous and student-centered learning. The university has invested a lot of money and pushed to increase the use of Information Technology in learning and teaching. The university aims to increase online courses and hopes that all faculties will offer more online courses in the future.

Problem Statement

The number of online courses is increasing worldwide. For example, in the United States, the number of courses offered through distance learning has grown from 47,500 in 1998-1999 to 1118,100 in 2000-2001 (Kiernan, 2003). In one of the universities in Thailand, online courses have increased steadily, from 111 courses in 2001 to 707 courses in 2005 (Planning Division, Prince of Songkla University, 2008). Moreover, because of rapid development of distance education, many institutions in Taiwan have turned to design many web-based courses and more applications of computing technology (Hsu & Shiue, 2005). Proponents of this type of course believe that technology is a means to aid in the creation of a learner-centered environment in higher education and an innovative and meaningful way to advance the spreading of the knowledge (Krentler & Wills-Flurry, 2005; Shovein, Huston, Fox & Damazo, 2005). In addition, current research has indicated that the learners studying online-courses possess self-directed learning characteristics and self-directed learning skills necessary for successful completion of an online course (Gearhart, 2002; Oladoke, 2006)

However, many students are not successful in an on-line learning environment; they want a teacher in a classroom and depend upon that teacher for structure and content-knowledge (Lee, 2003). Unlike their colleagues who thrive in less teacher-centered learning environments, many students persistently cling to teacher-centered classrooms.

The best explanation for this anomaly is the conflict between the instructional strategies of andragogy and pedagogy. Andragogy supports student's self-directedness in teaching and learning, while pedagogy supports the dependence of the student upon the

teacher (Knowles, Holton III & Swanson, 2005). Technology driven coursework, as intended, designed and offered by PSU faculty, aims to directly impact and enhance students' self-directedness in learning; this strategy supports an andragogical philosophy of instruction. However, traditional classroom settings and coursework delivery- the sage on the stage- support teacher-centered instructional philosophy and promote the dependency of the learners.

Purpose of the Study

The purpose of the study was to explore the relationship between student success in coursework, student preferences for self-directed (on-line) or (teacher-directed) traditional classroom settings and instructional strategies of pedagogy and andragogy evidenced in PSU course offering.

Through the lenses of andragogy and pedagogy, the research questions guiding this study were:

1. What are the course design preferences of students studying in the university?
2. What factors do students believe affect their success in studying those courses?
3. What is the academic success of the students enrolling in hybrid and traditional courses?
4. In what ways do andragogy and pedagogy relate to student success and student preferences?
5. What other realities are revealed about student success, student preferences of learning and instructional styles?

6. How useful are the instructional concepts of andragogy and pedagogy for understanding student academic success?

Conceptual Framework

Knowles, Holton III and Swanson (1998) posit that the andragogy is a process model in education. This model is concerned with providing procedures and resources for helping learners acquire information and skills. In this model, the teachers do not play an important role in delivering the instruction; they are facilitators helping learners to achieve their goals and they work to develop humans capable of adaptation, free inquiry and self-sufficiency. The assumptions of this model are:

Need to know. The learners need to know why they need to study something before undertaking to learn it. So, the role of the facilitator is to help the learners become aware of the "need to know."

Learner's self-concept. The learners are self-directing or they have the self-concept of being responsible for their own decisions, and for their own lives.

Experience. The learners enter the educational activity with a different quality of experience.

Readiness to learn. The learners are ready to learn those things they need to know and be able to do in order to cope effectively in their real life situations.

Orientation to learning. The learners are motivated to learn with a life-centered, task-centered, problem-centered orientation to learning. They learn new knowledge, understandings, skills, values, and attitudes most effectively when they are presented in the context of application to real-life situations.

Motivation. The learners learn because of internal factors. The potential motivators are internal-self esteem, recognition, better quality of life, greater self-confidence, self-actualization, and the like (Knowles & Associates, 1984).

Conner (2004) asserts that andragogy is the idea of learning support. To be self-directed learners, students need to have a motivating need and the type of environment and format for learning influenced by their preference for learning. The ability to self-direct requires a transformation in how students seek and internalize information. Also, Pilling-Cormick (1997) claims that in self-directed learning, learners determine, investigate, and evaluate their needs. When learners consider their needs, they reflect on their learning process and become critical. Then the process of transformative learning exists. So in order to learn how to be self-directed, learners go through the process of development that must be transformative, that is, the students change their way of thinking about learning.

Pedagogy is the art of teaching children (Knowles, 1975), which is opposite to andragogy. Knowles, Holton III and Swanson (1998) posit that the word "pedagogy" is derived from the Greek word, meaning "child". So the term pedagogy literally means the art and science of teaching children. The pedagogical model offers six assumptions about the learners (Knowles, Holton III and Swanson (1998) which are, :

Need to know. Learners only need to know that they must learn when the teacher teaches if they wanted to pass and get promoted.

Learner's self-concept. Learners depend on the instructor.

Experience. Learner's experience is less important.

Readiness to learn. Learners are ready to learn when the teacher tells them to do if they want to pass and get promoted.

Orientation to learning. Learners have a subject-centered orientation to learning.

Motivation. Learners are motivated to learn by external factors.

Yoshimoto, Inenaga and Yamada (2007) conclude that "the pedagogy mode is like on campus learning and the andragogy mode is like off-campus open learning" (p.80). This study examined this conclusion in a Thai context.

Procedures

This study was aimed to investigate the relationship between student successes in course work, student preference for self-directed (on-line) or (teacher-directed) traditional classroom setting. I used an explanatory case study with this study: a survey, an observation and a focus group interview.

Researcher

I am one of the academic staff for Prince of Songkla University. I have been working at Department of Languages and Linguistics, Faculty of Liberal Arts for nearly 17 years. I also have both hybrid and traditional classes. I believe that my experience and training will help me into the insight into the profession, enabling me to connect with my research participants and opening doors which might have not been available to others. I feel that my past experience also provided me with a working knowledge of being an instructor, and creditability as someone that could be trusted.

Data Needs

There were three sources of data that were important for this study. First, I needed the student preferences and self-directed learning characteristics. In addition, the data from the instructors about the courses they taught and how they taught and ran the class were very vital. Then, the data of student success and documents of course types or any related materials would help me explain this relationship.

Participants

Since I needed the information of hybrid and traditional courses and information of students who were successful in hybrid and traditional courses, there were two groups of participants of my study: faculty and students

Faculty. The faculty members who taught traditional and hybrid courses were randomly chosen to participate in the study. They allowed me to observe their classes and provided course information through a survey.

Students. Students who participated in my study were students in the classes whose instructors I observed and provided course information. Students in the classes completed a preference survey and some students in those classes were randomly selected to do focus group interviews.

Course Types in Prince of Songkla University. There are two types of courses in Prince of Songkla University (PSU). The first is a traditional course. The instructor who has the traditional course delivers lectures and all activities occur in the classroom, for example, having a quiz, and doing a pair work or group work. The other is a hybrid course. The instructor who teaches the hybrid course will have both a lecture and use the server provided by the university, Virtual Classroom (VCR) as a supplement to add some

activities for students, for example, downloading the materials, posting the VDO or teaching materials used in class, submitting assignments, studying materials, doing online quiz, assigning students to surf the Internet before for the information before or after class and communicate with students. The instructor who teaches hybrid courses can add as many activities as s/he thinks that they help the students learn.

Data Collection

In order to get the information, the data was collected from the instructors, students and course documents.

Instructor observation. I conducted an instructor observation to have a clear picture of course instruction in PSU. After obtaining approval by the Institutional Review Board (IRB), I purposively selected six instructors from three clusters (health science, science and agriculture and social sciences) contacted them, and asked for their permission to observe the classes and to have their students complete the student survey during July 2008. Then, I would give an informed consent and ask the instructors to participate at their convenience in a class observation.

Instructor survey. In order to have a better description of the types of courses in Prince of Songkla University, the information from the teachers was important. It was very essential that the instructors completed the survey describing the courses they taught. The survey the instructors completed was based on based on the andragogical and pedagogical philosophies. It was translated into Thai and translated back into English by an expert.

Student survey. I employed a student survey which consisted of two parts: part one was written by the researcher and part two, The Self-Directed Learning Readiness

Scale (SDLRS). Part one was about demographic questions, types of courses the students prefer, their opinion towards learning and some open-ended questions. Part two was SDLRS which was designed to measures attitudes, skills and characteristics that include an individual's level of readiness to manage his or her own learning.

The survey was translated by two experts, one proficient in Thai and the other in English. The first expert translated the SDLRS into Thai and the second translated the survey which was in Thai version back into English. This was done to check the accuracy of the translation and to establish accuracy of the survey for use with the Thai student samples.

Focus group interviews. I conducted focus group interviews to have another source of student information. I had four focus group interviews: the students who succeeded in hybrid courses, the students who succeeded in traditional courses, the students who did not succeed in hybrid courses and the students who did not succeed in traditional courses.

To determine the students who were successful in hybrid courses, I checked for and selected those with the frequency of online log-in, time spent on doing online activities and their high final grade. For students who succeeded in traditional classes, I examined the final grade.

Course documents. I asked for some documents about the courses, for example, course syllabi, materials and other related information from six instructors whose classes I observed.

Data Analysis.

Data from the instructor and student survey were coded and imported into Microsoft Excel. I conducted a systematic analysis by using Statistical Package for the Social Sciences (SPSS Version 11.5, Babbie, Halley & Zaino, 2003). I used mean, median, mode, correlation and standard deviation for the instructor survey. ANOVA was also used on the student survey data. I used it to see the relationship between the year which the students studies, which was an independent variable, and self-directed characteristics. I also use t-test to see the relationship between the students who preferred each course type, which is an independent variable, and self-directedness, which is a dependent variable. And the information from the faculty survey and student survey open-ended questions was coded based on the andragocial and pedagogical frameworks.

Data from focus group interviews and from observations and documents were analyzed. Creswell and Clark (2007) advised that the researcher should analyze the qualitative data by using coding system. They suggested the researcher should divide the text into small units and assign themes to each unit. Moreover, the data would be used to explain how the learners regard their learning behavior, self-directed attributes, preferences and reasons as influences toward successfully completing each type of courses through the lenses of andragogical and pedagogical models of learning.

Significance of the Study

This study confirmed the notion of andragogical theory in online courses and added some interesting aspects to theories of adult education in a different context, Prince of Songkla University in Thailand. This would explain some unexplained realities or

might reveal some aspects. Moreover, the result of this study would present some new aspects of pedagogical instruction in traditional or hybrid courses.

With regard to the results, it would create new directions of research into the application of the andragogy model to online courses. This study would reveal some unexpected relationship between self-directedness and pedagogical philosophy, which needed in-depth research.

This study would impact the future practices in on-line learning for adult learners. Depending on the results, some institutions may need to adjust their courses to serve the self-directed learners. For example, if the data indicated that the students who studied via hybrid courses were self-directed and succeeded in learning those courses, educators and program leaders would need to reexamine their own on-line courses and adjust them to serve the learners. Intentionally, this study would affect Prince of Songkla University and other universities in Thailand in terms of the policy of on-line programs and student learning. If the results showed that all the students prefer on-line courses to traditional courses, the university administrators would reconsider the goals of teaching and promote more technology in teaching and learning. However, if the results showed that most students did not like hybrid courses and prefer traditional courses, the university administrators and the deans would need to reconsider the learning and teaching philosophy; they would need more research on hybrid courses and need to enhance and promote self-directedness in traditional courses. Furthermore, this study would reveal the other aspects of self-directedness in hybrid courses which are found in Thailand. This would be useful for some institutions which want to have on-line courses but did not want to stop all lecturing and concomitant teacher roles in class.

Summary

There is no evidence to show that students studying in hybrid courses possess self-directedness. With the increase in on-line courses, more research needs to be conducted regarding students learning experiences including different types of learning environment. Research has revealed that students studying online courses are self-directed and succeed in learning (Gearhart, 2002; Oladoke, 2006). This research focuses on investigating the relationship of self-directedness of the students enrolling in hybrid and traditional courses to their academic success. By examining the notion of self-directedness in correlation with Knowles's (1984) theory of andragogy, this research should help to determine the ways in which on-line programs in Thailand are moving in the right direction and should help to add another aspect to the adult learning theory.

Reporting

This chapter introduced the problem and design of the study. Chapter II contains a detailed review of related literature. Literature reviewed related to the notions of andragogy and pedagogy, self-directed model and research on self-directedness of students enrolling in online courses. Moreover, literature about success of studying online courses was examined.

A detailed description of the research methodology is included in Chapter III. I present the data which I found in Chapter IV and in Chapter V I analyze data presented in Chapter IV. The analysis was tied to the guidelines provided by Guglielmino (1977) as well as the results from coding system from focus group interviews.

Finally, Chapter VI is a summary of the research, conclusions as well as discussion. Then, I also reflect on the study and recommend further research.

CHAPTER II

REVIEW OF LITERATURE

This review of literature is divided into four parts. The first section is an overview of teacher-and learner-centered instruction. The second section describes self-directed learning which is essential in learner-centered instructions, and research on self-directedness. The third section focuses online teaching and learning. The last section is about andragogy and pedagogy. A summary concludes the chapter.

Teacher-and Learner-Centered Instruction

The instruction approach is very important to learners and to education. The instruction the teachers deliver to students depends on their instructional beliefs. Conti (1990) proposed that current adult educational practice can be grouped into two categories: teacher-centered or learner-centered.

The teacher-centered approach to instruction is closely related to the ideas of B. F. Skinner (Conti, 1990) and was widely practiced in adult education, for example, in Thailand before the Educational Reform in 1999. This approach assumes that the learners are passive, and that they become active by reacting to stimuli in the environment. Motivation is from either basic needs or emotion or from a tendency to respond to previous conditioning.

Conti (1990) posited that "humans are controlled by their environment, and the schools which are social institutions have the responsibility of determining and reinforcing the fundamental values necessary for the survival of the individual and the society" (p.81). The implementation of the teacher-centered approach can be noticed in classrooms in many ways. Learning is defined as a change in behavior. Therefore, acceptable forms of desired behavior are defined as hidden but measurable forms in behavioral objectives. Outcomes are described as competencies which students must display after completing the learning activities. The assessment of the competencies is accomplished by evaluating the learner with a criterion-referenced or a norm-referenced test.

Weinert and Helmke (1995) noted that the teacher who employs a teacher-centered approach wants the students to acquire knowledge and perform academically. Consequently, the teacher is the one who chooses appropriate tasks, presents subject-matter and solution strategies, diagnoses students' learning progress and difficulties, and provides help throughout the instructional process.

The learner-centered approach is strongly supported in the field's literature (Conti, 1990). This approach assumes that naturally people are good and individual growth is unlimited. From this perspective, reality is relative to the interpretations that people give to their surroundings as they associate with them. So, the behavior is the result of personal perceptions. Motivation is caused by people's attempts to achieve and maintain order in their lives. Importantly, personal experiences play a vital role in learning. Learners are expected to be active and responsible for their actions.

One of the differences between learner-centered and teacher-centered adult education is the root of philosophy that supports these approaches. Zinn (1990) summarized the differences of these two philosophies of adult education in terms of purpose, the learner, the teacher, concepts or key words, methods and people and practices.

Table 1

The Two Philosophies of Adult Education

	Teacher-centered	Learner-centered
PURPOSE	To bring about behavior that will ensure survival of human, societies, and individuals; to promote behavioral change.	To enhance personal growth and development; to facilitate self-actualization.
LEARNER	Learner takes an active role in learning practicing new behavior, and receiving feedback; strong environmental influence.	Learner is highly motivated and self-directed; assumes responsibility for learning
TEACHER	Manager; controller; predicts and directs learning outcomes.	Facilitator; helper; partner; promotes but does not direct learning.
CONCEPTS/KEY WORDS	Stimulus-response; behavior modification; competency-based; mastery learning; behavioral objectives; trial and error; skill training; feedback; reinforcement	Experiential learning; freedom; individuality; self-directedness; interactive; openness; cooperation; authenticity
METHODS	Programmed instruction; contract learning; teaching machines; computer assisted instruction; practice and reinforcement.	Experiential; group tasks; group discussion; team teaching; self-directed learning; individualized learning; discovery method
PEOPLE/PRACTICES	Skinner, Thorndike, Watson, Tyler; APL (Adult Performance Level); competency based teacher education; behavior modification programs.	Rogers, Maslow, Knowles, May, Tough, McKenzie; encounter groups; group dynamics; self-directed learning project; human relation training.

Note. From Identifying Your Philosophical Orientation (p. 76-77) by L.M. Zinn, 1990, Florida: Robert E. Krieger Publishing Co., Inc. Copyright 1990 by Robert E. Krieger Publishing Co., Inc. Adapted with permission.

Differences between the two are further detailed by the following dichotomies. For the teacher-centered or behaviorist approach, the teacher is a person who knows best. But, for student-centered or humanist approach, the teacher does not necessarily know best. Behaviorist education emphasizes changes in human behavior or changes in student knowledge. Humanistic education, however, focuses on the responsibility for learning being with the student—students are free to learn what they want to learn and in a manner they desire. From this perspective, a teacher gives a guideline or facilitates the process and the emphasis is on learning (Elijas & Merriam, 1980).

McKeachie (1978) mentioned that student-centered instruction tries to reduce the learner's dependence on the instructor, so it is expected to reduce the teacher's influence or power over the students. He summed up the differences between instructor-or instructor and learner-centered as the following:

Table 2

Dimensions upon which Student-Centered and Instructor-Centered Methods May Differ

STUDENT-CENTERED		INSTRUCTOR-CENTERED
Goals		
Determined by the group (Faw, 1949) Emphasis upon affective and attitudinal changes (Faw, 1949) Attempts to develop group cohesiveness (Bovard, 1951)		Determined by instructor Emphasis upon intellectual changes No attempt to develop group cohesiveness
Classroom Activities		
Much student participation (Faw, 1949, quoted in McKeachine, 1978) Student-student interaction (McKeachie, 1951) Instructor accepts erroneous or irrelevant student contribution (Faw, 1949) Group decides upon own activities (McKeachie, 1951)		Much instructor participation Instructor-student interaction Instructor corrects, criticizes, or rejects erroneous or irrelevant student contributions Instructor determines activities

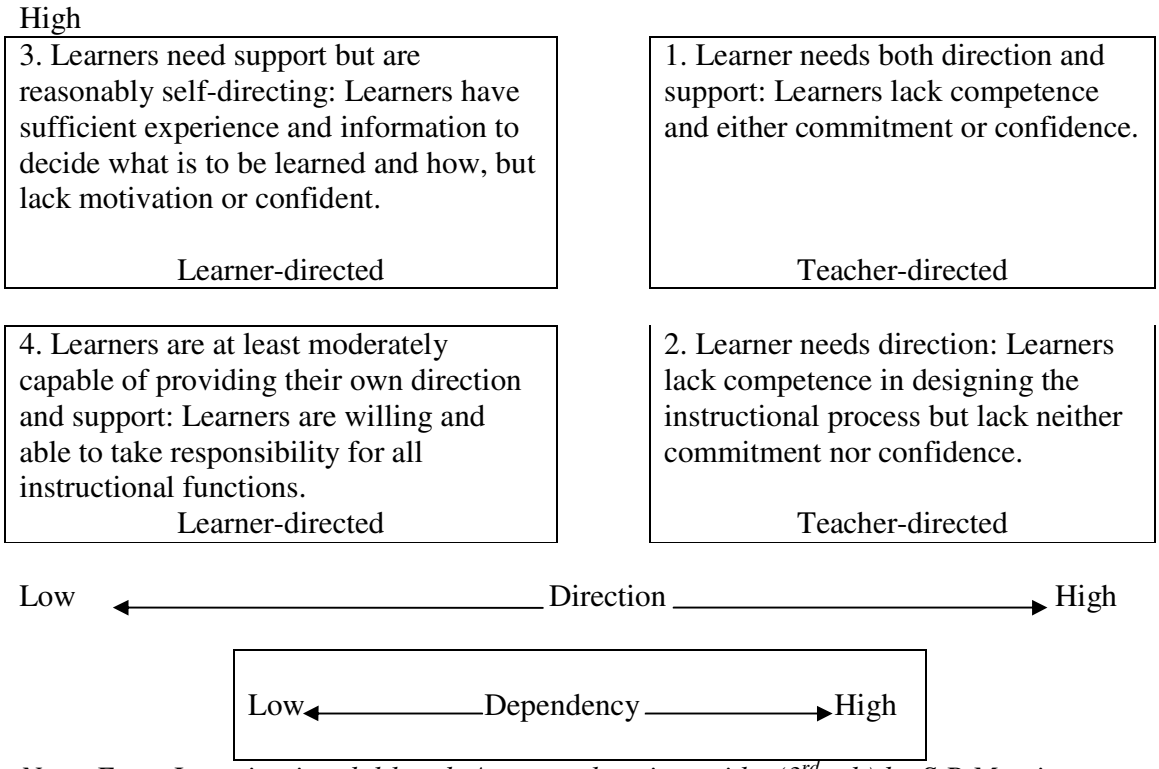
Classroom Activities		
STUDENT-CENTERED		INSTRUCTOR-CENTERED
Discussion of students' personal experiences encouraged (Faw, 1949)		Discussion kept on course materials
De-emphasis of tests and grades (Asch,1951)		Traditional use of tests and grades
Students share responsibility for evaluation (Ashmus and Haigh, 1952)		Instructor evaluates
Instructor interprets feelings and ideas of class number when necessary for class progress (Axelrod, 1955)		Instructor avoids interpretation of feeling
Reaction reports (Asch, 1951)		No reaction reports

Note. From Teaching tips by W.J McKeachie, 1978, Toronto: D.C. *Copyright 1978 by D.C. Heath and Company. Reprinted with the permission.*

McKeachie's (1978) views illustrate differences in approach along a continuum in term of goals and classroom activities.

Merriam and Caffarella (1991) classified the instructional situation based on direction and support needed by the learners, as shown in Figure 1. This model is based on differences in learner needs. If the learners need support and they are self-directed and responsible for their own learning, the instructor will use the learner directed model.

Figure 1. Level of Learner Dependency



Note. From Learning in adulthood: A comprehensive guide. (3rd ed.) by S.B Merriam &R.S. Caffarella, 1991, Jossey-Bass. Copyright 1991 by Jossey-Bass. Reprinted with the permission.

These philosophies or approaches, stress the significance of the learner's purposes, independence of effort on the part of the learner and support or assistance provided (Candy, 1990). Different strategies emerge given differences across these dimensions. The selection of teaching approach or model by the instructor is based on the goals of learning.

Self-Directed Learning

When an instructor turns to the learner-centered approach, one distinguishing characteristics of the learners emerges as essential-- self-directedness. The notion of self-directed learning (SDL) can be traced back to the time of the Greek philosophers

(Brockett & Hiemstra, 1991; Merriam & Caffarella, 1991) and has been the topic of research and discussion in the field of adult education for nearly three decades.

Defining SDL

SDL has been broadly defined as individuals learning on their own. SDL can be defined as a personal attribute, a learning process, or as a learning context. Houle (1961) has been credited for influencing the explosion of SDL research. In the 1960s, he classified adult learners into three different groups: activity-oriented, goal-oriented and learning-oriented. From his research it became evident that many participate in learning for the sake of personal enjoyment.

Candy (1991) viewed self-direction as a willingness and ability to lead one's own education (self-management). Self-directed learning is referred to as a self-motivated desire to follow one's choice of learning (Cross,1981; Hsu & Shiue, 2005). Self-directed learning begins when a person consciously and cognitively wants to know something, which has been identified as a desire, curiosity, an interest, a concern or even a wish. Grow (1991) agreed that it is generally accepted that all learners possess different stages of self-directedness. He proposed the stages of learner self-directedness as seen in Table 3.

Knowles (1975) defined self-directed learning as a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes (p.18).

Table 3

The Stages of Self-Directed Learning Model

Stage	Student	Teacher	Instruction suggested
1	Dependent	Authority, coach	Coaching with immediate feedback. Drill. Informational lecture.
2	Interested	Motivator, guide	Inspiring lecture plus guided discussion. Goal setting and learning strategies.
3	Involved	Facilitator	Discussion facilitated by teacher who participates as equal. Seminar. Group projects.
4	Self-directed	Consultant	Internship, dissertation, individual work or self-directed study group

Note. From "Teaching learners to be self-directed" by G.D. Grow,1991,Adult Education Quarterly,41(3),p.129.Copyright 1991by American Association for Adult & Continuing Education. Reprinted with the permission.

Tough (1977) posited that self-directed learning can be defined as self-planned, self-instruction, self-education, independent study, or individual study, which learners are responsible for their own learning. He proposed the steps in self-planned learning projects which help learners to become self-directed, for example, deciding what detailed knowledge or skill to learn, deciding the specific activities, method, resources, or equipment for learning and choosing where to learn. When individuals become more mature and take responsibility for their lives, they become increasingly self-directing.

Self-directed learning can be defined as a mode of organizing instruction in formal settings (learner-control: Candy 1991). Garrsion (1997) suggested that self-directed learning should go beyond assignment control and incorporate the process of accepting responsibility to construct meaning and cognitively monitor learning process itself.

Overall, the definition of self-directed learning goes beyond the learner's characteristics to the control of learning process and to learning opportunities in the

collective environment. Much research on SDL has focused on the verification of SDL among adult learners and descriptions of models for understanding SDL (Brockett & Hiemstra, 1991; Merriam, Caffarella & Baumgartner, 2007). There is a little attention in the operation of self-direction in a specific context (Song & Hill, 2007). It is widely accepted that self-directed learning can be found in formal classroom settings. However, with the advent of technology, many universities offer more online courses to serve the growing number of learners, so the classroom setting changes from traditional classroom to virtual classroom (Kiernan, 2003). The shift to online learning causes challenges to instructors and their institutions (Palloff & Pratt, 2005).

SDL Assessment

There are four instruments, which were constructed to assess the learner SDL characteristics. The first instrument was Self-Directed Learning Readiness Scales by Guglielmino (1977). It was developed to assess the learner self-directedness and has been widely used. The second is the Oddi Continuing Learning Inventor (OCLI), (Oddi, 1987). It was designed to identify the personality construct and learner self-directedness (Oddi, Ellis, & Roberson, 1990). Merriam, Caffarella and Baumgartner (2007) posited that "more than twenty-five variables have been positively correlated with self-directedness as measured by the OCLI" (p.120). It was widely used by nurse educators who are interested in participation in continuing profession education (CPE) (Merriam, Caffarella, & Baumgartner, 2007). The third instrument is the Self-Directed Learning Perception Scale by Pilling-Cormick (1977), a tool to investigate a learner's perceptions that help them to possess the SDL skills (Hiemstra, 2003). And the fourth is the PRO-SDLS, "a scale based on the Personal Responsibility Orientation model that Brockett and

Hiemstra presented in the 1991 book" (Hiemstra, 2003, p. 6). This instrument was developed by Stockdale (2003) and was aimed to use with college students. However, the instrument which is widely used in the SDL research is SDLRS.

In this study I used SDLRS because this instrument is widely used to measure the learners' self-directed characteristics but it is never used with Thai students. Moreover, this instrument is widely accepted as a reliable tool to assess the learner self-directed characteristics.

Self-directed learning readiness scale (SDLRS). SDLRS is a self-report survey with Likert like items developed by Guglielmino (1977). It is designed to measure the attitudes, skills, and characteristics that can be found in each learner's level of readiness to manage his or her own learning. The factor analysis of SDLRS identified eight principle factors: openness to learning opportunities; self-perception as an effective learner; initiative and independence in learning; acceptance of responsibility for one's own learning; love of learning; creativity; positive orientation to the future and an ability to use basic study and problem-solving skills.

SDLRS research. Since its development, the SDLRS has been employed in more than 150 research studies. The most recent, in2000, studies are relevant to self-directed characteristics and online courses. Gearheart (2002) found a strong positive correlation between the successful completion of self-assessments in the Dakota State University orientation module to the successful completion of an online course. It showed that an orientation module gave a chance for a potential learner's to evaluate whether the course management and procedure were compatible with the learner's learning style in an online course in this study.

Fitzgerald (2003) wanted to determine if the match between a participant's learning style and type of online instruction improved learner performance. He found that the participants studying with their preferred learning style had the highest mean of improvement on pre and post tests and those with average or below average scores of self-directed and collaborative learning showed the least improvement. His study confirmed the hypothesis that matching the type of activity, collaborative or self-directed to the learner's preferred learning style improved learner performance.

Robinson (2003) studied the relationship between self-directed learning readiness and resilience among graduate students. She administered the Self-Directed Learning Readiness Scales (SDLRS) by Guglielmino (1977) and the Resilience Scale (RS) by Wagnild and Young (1993) with 148 participants. She discovered that there was a significant positive correlation between SDLRS and RS means score and there was also a positive correlation between SDLRS and the resilience factors, which are personal competence and acceptance of self and life.

Ware (2003) investigated the relationships of self-directed learning and learning styles among developmental reading students. She used two survey, SDLRS and learning preferences by Gregorc Style Delineator (Shapiro, 2000) with 84 undergraduate students. The results showed that there was a significant inverse correlation between SDLRS relationships and learning styles.

Hsu and Shiue (2005) studied 126 Taiwanese college students and examined their educational background, their self-directed learning readiness (SDLRS) and their prior success in classes. The result revealed that Taiwanese college students studying at a distance performed as well as their on-campus counterparts on average. Moreover, the

finding showed that the strength of students' background (prior GPA and SDLR) was a strong factor for determining students' achievement in the distance education mode than in the face-to-face mode of learning. This study indicated that SDLRS may serve as a key factor for educators in accessing entering students and developing support strategies for academic advising in Taiwan's education.

Oladoke (2006) employed three quantitative assessments: Distance Learning Readiness Assessment (DLRA), Self-Directed Learning Readiness Scale (SDLRS), and Index of Learning Styles (ILS) and two qualitative methods, journals and interviews. Her study showed that the learners understood self-directed learning and the factors that reduced the self-directed learning in the online learning affected learners' abilities to be successful in learning online courses. It also revealed that these learners had self-directed learning characteristics and they applied these characteristics to their learning and learning styles, motivation, learner control and convenience of learning online had the effect on the learners' abilities to self-direct their learning in an online environment.

In this study, I hope to expand on the research using the SDLRS with a sample of Thai students. The validity and reliability of this instrument has been confirmed through repeated use across a variety of groups, contexts and nationalities.

Online Teaching and Learning.

Gray (1999) mentioned that "if the basis of lifelong learning is self-directed, then the Internet could probably be classified as one of the most powerful and important self-directed learning tools" (p. 120). Teaching in the cyberspace classroom needs the educators to move beyond traditional models of practices into new pedagogies that are more facilitative. Palloff and Pratt (2005) contended that "the online classroom is a

potentially powerful teaching and learning arena in which new practices and new relationship can make significant contribution to learning" (p.25). Generally, an online-computer-mediated environment consists of synchronous and/or asynchronous communication, web-based instruction, web search, online resources, and technical support (Huang, 2002). One of the most important aspects of online learning is that it allows learning to be place and time independent (Rovai, 2000). Learners can study anywhere and whenever they want to study and the ability to be a self-directed learner is crucial for learners in a rapidly changing, technologically complex society (Hsu & Shiue, 2005). Song and Hill (2007) posited that the online learning context can influence SDL personal attributes of resource and strategy use and motivation and the process of learning, in terms of planning, monitoring and evaluating.

Teaching online courses takes a large amount of time to design, develop and deliver a course. In the online environment, it is important that the educators move beyond traditional practice of the instructor and the format of the courses promote the flexibility for students, increase interaction among students and instructors, and finally improve student performance on examinations that require complex reasoning skills (Shapley, 2000). Moreover, teaching effectively online requires the understanding of instructor's roles and learner characteristics (Conceiçã o, 2007)

Instructor Role in Online Learning

Instructors are very important in learning and can tremendously affect the learners. Bender (2003) mentioned that factors which are essential in the teacher's style comprise being supportive, encouraging, giving enough feedback being a good role

model, being formal and eliciting discussions. These features can be also perceived online.

McKeachie (2006) proposed the six characteristics of the teachers which can be applied to online teaching.

1. An expert who delivers his/her expertise through lectures and discussion and is able to encourage students to learn.
2. A formal authority that helps students by creating boundaries such as acceptable behavior and dates of handing in assignment or work.
3. A socializing agent who has many contacts with the larger academic community, and can be helpful to students in providing something, for example, letters of recommendations and links to publication sources.
4. A facilitator who promotes students learning by encouraging active participation and by helping students to see education as meaningful and relevant.
5. An ego ideal who is charismatic and shows commitment and enthusiasm in both subject matter and students.
6. A person who shows compassion and understanding of student needs.

Apart from the teacher's roles which influence the online learners, the quick response of the instructor to online discussion is of importance for the learners, which may lead to better performance and reduce procrastination (Petrides, 2002; Elvers, Polzella, & Graetz, 2003; Vonderwell, 2003). Procrastination is a major factor affecting online learners and it can further affect student success (Elvers, Polzella, & Graetz, 2003). Besides social climate, for example, concern for students' work or sympathy helps

foster a student-centered learning atmosphere and significantly understanding student characteristics is important for online learning and teaching (Vonderwell & Turner, 2005). The research by Mullen and Tallent-Runnels (2006) revealed that the instructor's affective supports, for example, listening to students, encouraging them to share ideas and providing humor, were very important in both online and traditional classes.

Learner Characteristics

Learners are important in online classes. They need to have certain characteristics to be successful in learning. Skager (1979) suggested that a self-directed learner is someone who has a willingness to create and maintain systematic learning on his/her own initiative and may be likely to seek help from others and work cooperatively. S/He should have seven characteristics, as follows:

1. self-acceptance, or positive view about the self as a learner based on experiences.
2. planfulness, the ability to survey their own need, set goals, and select or devise learning strategies to accomplish goals.
3. intrinsic motivation, willingness to further learning in absence of external rewards or punishment.
4. internalized evaluation, the capacity to apply evidence to the regulation of one's own activity.
5. openness to experience, or willingness to engage in new activities because of curiosity or similar motives.
6. flexibility, or willingness to explore new activities of learning.
7. autonomy, ability to choose learning goals and means.

In addition to the seven characteristics proposed by Skager (1979), research indicated that student who became self-directed should have six learning competencies. These competencies are required for individual to become self-directed. The competencies included self-assessment of learning gaps, evaluation of self and others, reflection, information management, critical thinking and critical appraisal (Brockett & Hiemstra, 1991; Candy, 1991; Patterson, Crooks & Lunyk-Child, 2002). These competencies can be found in online learning and teaching and were very important for students to become self-directed and lifelong learners (Patterson, Crooks & Lunyk-Child, 2002).

Much of the research in an online distance education revealed that students needed to have high level of self-direction, to be self-disciplined and know how to learn and explore different sources and strategies for learning in order to be successful in online learning environment (Shapley, 2000; Leasure, Davis & Thievon, 2000; Vonderwell & Turner, 2005).

Student Success

Online learning presents many challenges to learners (Hara & Kling, 1999). For example, the learners may have the problem of procrastination, or lack of prompt feedback. So, successful online learners need to work hard to achieve their goals of learning. Therefore, successful online students spend much time reading, discussion posts, viewing discussion and linking their online activities to doing what it is important to earn good grades (Morris, Finnegan & Wu, 2995).

Also, some studies revealed that successful online students possess specific characteristics, that is, they willingly search for addition education, are motivated and

more self-disciplined and, have high goals. They are likely to have a more serious attitude toward what they learn, and do work independently (Moore, 1986; Palloff & Pratt, 2005). They can judge the appropriateness of the new skills, information and ideas, deciding whether the goals have been achieved.

Success in learning online courses depends on both instructors and students. Instructors should be the one who gives the guidelines for the learners. Also, learners should possess learning characteristics, for example, self-motivated, flexible, and self-accepted.

Andragogy and Pedagogy

The term "andragogy" was first studied by a Dutch adult educator, Ger van Enckevort (Knowles, Holton III & Swanson, 1998). He found that the first use of the term "andragogy" was by a German grammar school teacher when he described the educational theory of the Greek philosopher,Plato. Later, Knowles used this term to contrast with the term "pedagogy" (Knowles, Holton III & Swanson, 1998).

In 1970, Knowles proposed four assumptions for his andragogical model:

1. Self-concept. The learner's self concept moves from one of being a dependent personality to one of a more independent self-directed learner. With this transition, the learner develops a deep psychological need to be seen and treated by others as being able to be self-directed in their learning.
2. Experience. The learner enters the learning situation with different experiences. They accumulated a number of experiences that become a useful resource for learning.

3. Readiness to learn. The learner is ready to learn and become oriented increasingly to the developmental tasks.
4. Orientation to learning. The adult learner has different goals of learning than do children. The learner's orientation to learning shifts from subject-centeredness to problem-centered or task centeredness. Adults are motivated to learn to the extent that they perceive that learning will help them perform tasks or deal with problems which they face in their real life situation. They learn new knowledge, understandings, skills, values, and attitudes effectively if they are presented in the context of application to the real-life situations.

Later, Knowles and Associates (1984) adjusted his model by adding the fifth and sixth assumptions: motivation and the need to know. They proposed that adults are motivated to learn by internal pressures (the desire for self-esteem, quality of life and the like). They also proposed that learners need to know why they need to learn something before they undertake it.

The word "pedagogy" is derived from the Greek word, meaning a child. So the term, pedagogy literally means the art and science of teaching children. This term is about learning and teaching that evolved between the seventh and twelfth centuries in the monastic and cathedral schools. Also, Brown (2006) asserted that "Knowles defined pedagogy as the science of teaching" (p.707). This instructional model gives the teacher full authority to make decisions on what will be learned, how it will be learned, when it will be learned and if it will be learned. Like their andragogical model, Knowles and Associates (1984) based their pedagogical model on four assumptions

1. The learner's self-concept. The learner has a dependent personality. They depend on the teachers for learning.
2. The role of experience. The learner's experience is less important than that of the teacher's. So teaching techniques (lectures, assigned reading, etc.) are very important for this pedagogical methodology.
3. Readiness to learn. Learners will be ready to learn when the teacher tells them to do.
4. Orientation to learning. Learners have a subject-centered orientation to learning.

Later in his book "Andragogy in Action" (1984), Knowles and Associates added two the same two more assumptions to the pedagogical model as were added to the andragogical model: need to know and motivation. They proposed that learners are motivated to learn by external motivators. They also posited that learners in this model learn when the teacher tells them to do and they do not need to know how what they learn will apply to their lives.

From her research, Cross (1981) proposes seven differences between andragogy and pedagogy. These two terms are not a dichotomy; they are on a continuum. The instructor determines which model will best serve the learner's needs.

Table 4

The Difference between Pedagogy and Andragogy

Assumptions			Design Elements		
	Pedagogy	Andragogy	Pedagogy		Andragogy
Self-concept	Dependency	Increasing self-directedness	Climate	Authority oriented, formal, competitive	Mutuality, respectful, collaborative, informal
Experience	Little worth	Learners are a rich resource for learning	Planning	By teacher	Mechanism for mutual planning
Readiness	Biological development, social pressure	Developmental tasks of social roles	Diagnosis for needs	By teacher	Mutual self-diagnosis
Time perspective	Postponed application	Immediacy of application	Formative of objectives	By teacher	Mutual negotiation
Orientation to learning	Subject-centered	Problem-centered/student-centered	Design	Logic of the subject matter; content units	Sequenced in terms of readiness; problem units
			Activities	Transmittal techniques	Experiential techniques (inquiry)
			Evaluation	By teacher	Mutual rediagnosis of needs; mutual measurement of program

Note. From Adults as learners: Increasing participation and facilitating learning(p.224) by K.P.Cross,1981, San Francisco: Jossey-Bass Publishers. Copyright 1981 by Jossey-Bass Publishers. Reprinted with the permission.

Andragogical education should have seven characteristics. First, participation should be voluntary. Adult learners want to participate for their own personal fulfillment or some other internal motivators in this learning situation. Further, andragogical education should have collaboratively-determined objectives. In the learning

environment, the learner and the facilitator/instructor collaboratively negotiate what the learner wants and what the facilitator (and possibly the organization supporting the facilitator) believes is necessary to exhibit competence. And the learner in the andragoical education should have performance-based assessment of achievement and measuring satisfaction. Also, learner in the andragogical education should have an appropriate learning environment. Knowles (1996) supports considerable space to provide physical logistics such as creature comfort and room arrangement. Moreover the characteristics of facilitator are of importance. The facilitator should have friendliness, confidence, content knowledge, charisma, empathy, humor, expressiveness, enthusiasm, body language, fairness, respect, kindness, and understanding. Lastly, technical issue is important for andragogy (Rachal, 2002). The teaching style or technical method of teaching used by the facilitator should match the learners.

In conclusion, Rachal (2002) summarized that andragogy can be implemented through the use of a learning contract, in which learning objectives, strategies, and resources, achievement and criteria and means of assessment are collaboratively determined by the learners and the facilitator.

The concepts of andragogy and pedagogy have been studied by many. I review the latest research beginning from 2000.

Andragogy and Pedagogy Research

Hornor (2001) compared two groups of adult students taking an introductory college algebra course in a community college with the two types of instructions, andragogical instruction and traditional instruction. The experimental group was taught by using andragogical instruction. They attended the class, did self-directed and self-

paced learning projects once a week by receiving computer-assisted instruction in the computer lab. Moreover, the instructor was available for questions. Group presentations and student-peer helping groups were formed. The assessments were performance on chapter tests, work done in the computer tutorial program, group presentation and final exam. However, the control group received only lectures by the instructor. The assessments were chapter tests, quizzes and final exam. She found that the experimental group had statistically significant higher post test than students in the control group and the experimental group had better attitudes than the adult students in the control group. She found that andragogical instruction is appropriate with adult learners in the community college.

Birzer (2004) developed an andragogical guide based on Knowles's model but he deleted principle number 6, which was help learners to carry out their learning plans because he mentioned that this principle is combined with other principles. He used his guide with a criminal justice program. He found that the andragogical guide fosters many of the competencies and traits that are desired in criminal justice professionals. For example, objectives are developed by the students; conceptual learning and model building are employed. The end result is learning and the absorption of knowledge of general problem solving strategies, critical thinking and reflective learning. He suggested that although andragogy was very promising in many classroom settings, it was recognized that it was not applicable to the fullest extent in every criminal justice classroom.

Yoshimoto, Inenaga and Yamada (2007) compared pedagogy and andragogy in higher education between Germany, the UK, and Japan. They found that some

pedagogical resources, provision, and orientations are more relevant for the outcome of mature students/graduates. Mature students appreciate A-mode (andragogy mode) because they thought it was more practical, free and independent with well-developed learning materials and other provisions while young students prefer P-mode (pedagogy mode). They need contacts and communication with teachers, friends and other students both in classroom setting and out-of-class activities. Most Japanese universities and traditional universities in UK focus on the P-mode and general content. German universities tend to concentrate on subject-specific skills and professional competencies that are linked to professional requirements.

It is likely that andragogy is a suitable model in understanding adult learning in a changing world. It is widely accepted that adults learn differently from the young so to make the adults reach the goal of learning, the use of andragogy possibly fit their needs.

Summary

The literature reviewed confirms that self-directedness is an important characteristic for learners to be successful in learning. This characteristic can be fostered and maintained by the teacher's instruction. It has been widely accepted that learner-centered teaching practice promotes this learning characteristic. With the advance of technology and online instruction, the classroom environment is changing so the learning and teaching are also changing. So the educational model should be changed to support the growth of the new type of learning, online learning. It seems that pedagogical education does not support this new kind of learning. Andragogical education supports this new learning type. Andragogy fits adult learners, especially students in the university

who are learning in the changing world. Therefore, learning will collaboratively happen through the working between the students and facilitators.

CHAPTER III

METHODOLOGY

The purpose of the study was to explore the relationship between student success in coursework, student preferences for self-directed (on-line) or (teacher-directed) traditional classroom settings and instructional strategies of pedagogy and andragogy evidenced in PSU course offerings. Six research questions were studied through the lenses of andragogy and pedagogy:

1. What are the course design preferences of students studying in the university?
2. What factors do students believe affect their success in studying those courses?
3. What is the academic success of the students enrolling in hybrid and traditional courses?
4. In what ways do andragogy and pedagogy relate to student success and student preferences?
5. What other realities are revealed about student success, student preferences of learning and instructional styles?
6. How useful are the instructional concepts of andragogy and pedagogy for understanding student academic success?

The design of this study was an explanatory case study with a need to describe one phenomenon. Creswell (2003) asserts that "qualitative research uses multiple methods that are interactive and humanistic. The methods of data collection are growing and they increasingly involve active participation by participants and sensitivity to the participants in the study" (p.181).

Setting

This study was conducted at Prince of Songkla University (PSU), Hat Yai Campus. PSU is located at Hat Yai District, Songkhla Province, which is in the South of Thailand. The university was established during a period of intense development of the country. At the beginning of its foundation, the committee overseeing the establishment of the university named it University of the South. Then, with permission from His Majesty King Bhumibol Adulyadej, it was named Prince of Songkla after the royal title of his father, His Royal Highness Prince Mahidol of Songkla. In academic year 1967, Prince of Songkla enrolled its first students. During that time the students temporarily studied in Bangkok before being transferred to the university's own campus at Tambon Roosamilae, Muang District, Pattani Province, in 1968, and at Tambon Kohong, Hat Yai District, Songkhla Province, in 1971.

The university built up its high academic standards in their first ten years and expanded to different academic disciplines. The university increased both its research output and the variety of academic services to the community. Several new units were established to support this expanding role and to provide the university with capability to

cooperate in national economic and social development, with regard to the southern region.

Today there are five campuses scattered around the southern region: Hat Yai, Pattani, Trang, Suratthani and Phuket. Hat Yai is the largest campus with 14 faculties (colleges); faculty of Medicine, Engineering, Nursing, Pharmaceutical Sciences, Science, Dentistry, Natural Resources, Traditional Thai Medicine, Agro-Industry, Law, Management and Sciences, Liberal Arts, Economics, and Environmental Management (graduate level only). Across all campuses, the number of undergraduate students is 14,390 and the number of graduate students is 3,063 (Registration Office, Prince of Songkla University, 2008). The total number of staff is 7,053, including 1,256 teaching staff and 5,797 support staff (Planning Division, Prince of Songkla University, 2008).

Conceptual Framework

The theoretical framework for this study was based on andragogy by Knowles (1975). This model is concerned with providing procedures and resources for helping adult learners acquire information and skills. Knowles assumed that learners need to know why they need to study, that learners are self-directed or they have self concept of being responsible for their own decisions, that learners enter the classroom with different experience, that learners are ready to learn and to be able to cope what they learn in their real life situations and that learners are motivated to learn with a life-centered, problem-centered orientation to learning.

Knowles (1975) also mentioned the opposite model to andragogy, which was pedagogy. He believed that the learners in this model depend on the teachers. He assumed that the learners learned when they have to learn to pass the exam or to get

promoted, that the learners depend on the teachers, that the learner's experience is less important, that the learners were ready to learn when the teachers told them to do and that the learners were motivated to learn by external factors.

Data Needs and Sources

Data needed for this study were student preferences and self-directed learning characteristics in on-line and traditional classrooms evidenced by how faculty teach and run both types of classes and student success in both types of courses. Moreover documents of course types and related materials are also important for this study to add more information to both types of courses, hybrid and traditional courses.

Data sources or participants for this study were faculty who taught hybrid and traditional courses and students who are successful in on-line and traditional courses. The students having B+ or higher grades (75% or more) in both on-line and traditional courses were deemed successful. The students getting D or lower (less than 50%) were deemed unsuccessful.

Data Collection

This study consisted of quantitative and qualitative data. Two surveys were employed, one survey for students to get information about student's self-directedness and their preferences and the other for instructors to get information about their course types and their opinion on self-directed learning. Therefore, there were two groups of the participants in my study: instructors and students. The participants were purposively chosen.

Instructor Participants

Two groups of instructors were involved for this study: one group participating in class observation and the other participating in the instructor survey. Each group was selected differently. I used purposeful sampling for the collection of qualitative data documenting teachers and classroom activities. I used random sampling for the collection of quantitative data needed to describe classroom demographics. Patton (2002) asserts that qualitative study involves purposeful sampling to enhance the understanding of the information while quantitative data involves probability sampling to permit statistical inferences to be made.

Instructors for class observation. After obtaining approval by the Institutional Review Board (IRB, see Appendix A). I selected six instructors to participate in classroom observation with the criteria that the instructor had taught a required course and used a normal distribution curve when s/he assigned grades to the learners. I purposively selected the instructors from three clusters (health-science, science and agriculture, and social sciences) with the criteria that the instructor had taught a required course and used a normal distribution curve when s/he assigned grades to the learners. I observed two instructors from each cluster. One instructor was the one who taught only hybrid courses and the other was the one who taught only traditional courses. After the sampling, I contacted the six instructors directly and asked for their consent to observe their classes. Then I visited them at their offices; introduced myself and the purpose of my study and made an appointment for the observation. While observing I used an observational checklist sheet to record what was going on in the classroom. Table 5 details the numbers of hybrid courses offered in each of the faculty clusters.

Table 5

Clusters of Faculty (college)

Clusters	Faculty	Number of hybrid courses
Health-science	Medicine	3
	Dentistry	8
	Pharmaceutical Science	45
	Traditional Medicine	7
	Nursing	25
Science and agriculture	Science	57
	Agro-Industry	26
	Natural Resources	35
	Engineering	114
Social sciences	Economics	25
	Law	7
	Management Sciences	62
	Liberal Arts	35
	Total	449

From "Number of hybrid courses" by Planning Division, Prince of Songkla University, 2008.

In the total, I conducted six instructor observations (three clusters × 2 instructors from each cluster). I conducted two observations for each instructor. The first observation gave baseline information and the second added some missing aspects from the first observations. I made 12 observations total.

Instructors completing surveys. There were 1,256 instructors of Prince of Songkla University, Hat Yai Campus (Personnel Division, Prince of Songkla University, 2008) at

the time of this study. Ten percent of the population was randomly chosen to participate in the study and were mailed a survey. A total of 130 faculties were asked to participate in the study. Mertens (1998) mentions that my study can have statistically significant result if a large sample size is employed. So if the sample size is 100, a standard deviation of 4.0 is required.

Student Participants

There were also two groups of students for this study. One group was involved in completing student surveys and the other group participated in a focus group interview.

Students involving in completing student surveys. I chose three hybrid courses, 170-303 Thai Medicine, a course in the faculty of Thai Traditional Medicine, 210-292 Digital System and logic Design in the faculty of Engineering and 460-213 Human Resources in the faculty of Management Sciences and asked that students in those courses to complete student surveys. There were 70, 60, and 120 students in those classes respectively.

Then I chose three traditional courses, 340-412 Metal Plating Industrial Science, a course in the faculty of Science, 542-321 Soil Fertility in the faculty of Natural Resources and 895-203 General Psychology in the faculty of Liberal Arts and those students in those courses complete surveys. There were 42, 118, and 77 students respectively. Overall, there were 487 students in this part of study.

Students participating in focus group interviews. Twenty-four subjects were chosen with the criteria that the students who succeeded in hybrid and traditional courses was that ones earned a B+ or high grades (75 % or more) and the criterion for selecting students who were not successful was that they earned a D or lower (less than 50%)

grades. I chose six successful students from hybrid courses, six successful students from traditional courses, six unsuccessful students from hybrid courses and six unsuccessful students from traditional courses. Twenty-four students were involved in the interviews.

Instrumentation

I employed two surveys with this study: instructor and student surveys. I constructed the instructor surveys to explore the notion of andragogy and pedagogy. And for the student surveys, I used the Self-Directed Learning Readiness Scale (SDLRS) with the permission from the owner, Guglielmino (1977). Before I collected the data, I piloted both surveys.

Instructor survey. I constructed the survey to determine the instructional principles from which they practiced: pedagogy or andragogy. The survey consisted of the instructor demographic, course design and activities, and their opinions towards teaching and learning.

Student survey. The survey had two parts. Part one was about the student demographic, the types of courses and activities the students have studied, the type of course they prefer and their reasons for liking it. Part two was the SDLRS. It was designed to measure the student learning characteristics by Guglielmino (1977). This instrument was developed by using the Dephi methodology panel of 14 authorities who were experts in the field of self-directed learning. The Self-Directed Learning Readiness Scale (SDLRS) has been used in many studies and it has been found to be valid for assessing self-directed learning characteristics in learners (Guglielmino, 2008). This survey instrument was used in an effort to gain more insights of Thai students with respect to their learning experiences.

In this study, a five-point Likert--like Scale was employed to gather data related the characteristics of self-directed learning. The "1" number represented "almost never true of me; I hardly feel this way, the "2" number represented "not often true of me; I feel this way less than half the time, the "3" number represented "sometimes true of me; I feel this way about half of the time, the "4" number represented "usually true of me; I feel this way more than half of the time and the "5" number represented "almost always true of me; there are very few times when I don't feel this way. In addition, I added open-ended questions to examine students' opinions on their preferences of hybrid and traditional courses.

Pilot study of the instructor survey. I piloted the instructor survey in June, 2008. I distributed 20 surveys to the lecturers in the faculty of Liberal Arts. Ten surveys were sent back with some questions. I read all returned surveys and adapted some questions to make them more explicit. I made some questions shorter. For example, I deleted a word from "Typically how many courses do you teach in each semester?" to "How many courses do you teach in each semester?" and I added some words, "in which program do you teach?" to "in which program do you teach? You can choose more than one." After piloting, I launched the instructor survey in September, 2008.

Pilot study of the student survey. Before launching the student survey, I conducted a pilot study. I piloted The SDLRS in the first week of June 2008 with 36 participants studying at Prince of Songkla University. Eighty per cent of participants were in the second year. Eighty-eight per cent of them were in the age of 20-22 years old. Moreover, eighty six per-cent of the subjects studied in the faculty of Management and Social Sciences. Ninety-two per cent of them were female and eight per cent are male. The

mean is 188.75 and standard deviation is 22.30. The reliability is 91.47 with 0.9147 alpha. This alpha coefficient reflected that the scores obtained from the instrument had an acceptable level of construct validity. When I finished the pilot study and confirmed suitability of the survey for data collection. I began collecting the data in July, 2008.

Data Collection

First, I launched class observations and the student survey. When I finished the observations and student surveys, I distributed the instructor surveys and finally I conducted focus group interviews.

Student surveys and class observations. I officially wrote a letter to the Office of Academic Affairs asking for the number of hybrid courses in PSU. This office organized the list of hybrid courses. I systematically chose the courses which were offered in the first semester of academic year 2008. So the first course listed from each of the three clusters was chosen. Three hybrid courses were selected and three traditional courses were chosen from the list of courses provided by the Registration Office. Three instructors were selected from a list of hybrid courses in the academic year 2007 provided by the Office of Academic Affairs. If some courses were not listed in the hybrid list, it was assumed that they were traditional. I did not choose any traditional courses from the college of Pharmaceutical Science, Medicine, Dentistry or nursing. One reason was that three faculties (Medicine, Dentistry and Nursing) had different study time compared with other colleges and students in the second, third or fourth year spend most of their time studying and working in the hospital. Moreover, the instructor from the faculty of Pharmaceutical Science was unwilling to participate in this study.

Following the selection, I personally contacted each instructor, informed them about the purpose of my study, presented them the translated letter of consent and asked for their permission to sit in their classes and have their students complete the survey.

Moreover, I asked them about their use of a normal distribution curve when they assigned grades. All used the distribution curve. I also informed them that I would have their students complete the surveys, adding that the surveys were about the type of courses the students prefer and factors that help them succeed in studying. All instructors agreed to allow me to conduct my study.

I started the class observations in July, 2008. When I was in class, I used an observation checklist (Murphy, 1997) to record what was going on in the class. The checklist was about the teacher's role in class, classroom environment, and the student characteristics in class. I visited each class and the instructor introduced me to the students.

I first visited the class in the faculty of Natural Resources. Before the class finished, the instructor allowed me to introduce myself and what I was doing. After that I distributed the surveys and collected them the next hour or asked students to return the surveys to me at my mailbox in my department, Department of Languages and Linguistics, the faculty of Liberal Arts. After the class in the faculty of Natural Resources, I visited the class in the faculty of Science, the faculty of Traditional Medicine, the faculty of Management Science and the faculty of Liberal Arts respectively.

A total of 231 surveys were returned (47.43%). Also, Gillham (2000) mentioned that if the response rate is lower than 30%, the value and validity of the method and result

are in question. I distributed the surveys in the first observation and the second observation was to get a clear picture of what was going on in each class. So I observed six courses and I visited each class twice.

Instructor survey. After getting the approval by IRB, I officially wrote a letter to the head of the Personnel Division informing him of the purposes of my study and asked him to provide me with the name list of staff of Prince of Songkla University, Hat Yai Campus. When I got the name list of 1,256 staff, I systematically selected 130 instructors. I searched for their addresses in www. psu.ac.th and went into each faculty and the department. There I got their titles, Assistant, or Associate Professor, and addresses and then I sent them the survey through the PSU mail system. I had to address their titles appropriately and correctly in order to make the participants feel good about my study and to cooperate in providing the information. In my culture, educational titles are very important. Then I sent them an introduction letter, explaining who I was and what I was doing, gave them an informed consent, and asked them to complete the survey at their convenience and sent it back to me when they finished.

I distributed 130 surveys with the symbols that I only understood to indicate each participant in September and got 40 returned surveys. Then I sent surveys again to the ones who did not return and I received 12 surveys back. A total of 52 surveys (40%) were returned in November. I assumed that some of instructors might be busy with preparation of the second semester and some might be away for the holiday after finishing the first semester.

Focus Group Interview

After the students knew their grades at the end of October, I wrote a letter to the Registration Office requesting for the list of grades A, B, D or E of the courses I observed. When I got the list of grades, I matched the grades with the student surveys looking for the students who got A, B+, D or E and gave me their contact number. I personally contacted 24 students (six students successful in hybrid courses, six students successful in traditional course, six students who do not succeed in hybrid courses and six students who are not successful in traditional courses) and asked for their consent to participate in the focus group interview. I made the appointment for the interview in November. I conducted each focus group separately. The first group was the students successful in traditional courses. I made appointments with six students who succeeded in traditional courses; four appeared on the interview day. For the second group, I called ten students who were successful in hybrid courses. This time six students came for the interview. For the third group I also made ten appointments with students who were unsuccessful in traditional courses and six students went to see me on the interview day. And the last group, I made eight appointments with students who were not successful in hybrid courses; five students appeared on the interview day. I had invited 34 students to participate; 21 were willing to participate.

The first focus group interview started in the last week of September. I asked the students to choose the place that they felt relaxed to talk. They all agreed to see me at my work place, the faculty of Liberal Arts. I booked a room and waited for them at the room. The interview was supposed to start at one the afternoon. When four students came, I told the group to wait for another five minutes for other students but there were no more

students. I started the interview by giving them an informed consent form, told them what research I was doing and asked for their permission to record their voices. I also told them that I would use pseudonyms for all of them so that no one could identify the participants. Each participant introduced themselves and the interview started. It took about one hour.

The second focus group interview started in December because the students did not have the same class schedule. They agreed to see me two weeks before the midterm examination and they were willing to interview at my place. I conducted this focus group the same as the first group. The interview took one hour and 20 minutes.

The third group was in January, 2009. It was difficult to schedule the interview because the students had many activities. At last they agreed to have an interview one Saturday afternoon. So I talked with them at the study area in the first floor of my work place. The students were on time and the interview took one hour and a half.

The last group was also in January after the students finished their class. The participants spent one hour and 20 minutes with me. When I finished each interview, I transcribed the recording.

Course Materials.

When I met the instructors at their offices, I asked them about the course materials. One instructor teaching the traditional course gave me the course outline and the schedule. Other instructors who taught the traditional courses did not give me any course materials but they told me that they gave the students course materials in the first hours. But the teachers who taught hybrid courses informed me that they posted the course material, course description and course outline in Virtual Classroom system

(VCR), the system developed by an instructor in the faculty of Engineering for online courses in PSU so that the students could download them when they wanted.

Frequency of Using VCR.

I planned to get the information of the frequency of students doing activities in VCR. I officially wrote the letter to the Deputy President for Learning Resources asking for the information of the frequency of students participating in the activities in VCR in November, 2008. However, I learned that the VCR system was broken down and all data could not be retrieved.

Data Analysis

The purpose of the data analysis process is for the researcher to understand the data while searching for deeper meaning. Quantitative data were statistically analyzed using Statistical Package for the Social Sciences (SPSS Version 11.5, Babbie, Halley & Zaino, 2003). Statistical data (frequency, mean, median, mode and standard deviation, ANOVA and t-test) were used to present the finding. Moreover, the correlation between student preferences and characteristics and multiple comparisons of correlations were conducted.

I used descriptive statistic with instructor and student surveys. I also used ANOVA with student surveys to see the relationship between self-directed learning and the year which the students are studying and t-test to determine the relationship of the year of student who preferred each course type and their self-directed learning characteristics.

A coding system was used to make sense out of the qualitative data dividing the text into small units and assign a theme to each unit. Creswell and Clark (2007) recommended that data should be prepared, read, coded, described, presented and interpreted respectively.

When I finished focus group interviews, I transcribed the recordings and subjected them to the review Creswell recommended. Interpretation was through the lens of pedagogy and andragogy.

Summary

The design of this study was an explanatory case study, quantitative and qualitative to get a broad picture of self-directed learning in Thai context. Data from students and instructors were collected and analyzed. The selection of the students and instructors participating in class observations were based on the type of course the students enrolling in the first academic year of 2008. Moreover, the selections of instructors completing the surveys were based on the name list from Prince of Songkla University and were randomly selected.

As a teacher and as a student undertaking some online courses I believe that my experience provided me a better understanding of self-directed learning and enabled me to connect easily with my research participants. It also provided me with insights during focus group interviews and observation process and helped me to conduct an in-depth data analysis.

The quantitative data was statistically analyzed by using Statistical Package for the Social Sciences (SPSS Version 11.5, Babbie, Halley & Zaino, 2003). The statistical interpretation was based on Guglielmino guidelines. The qualitative data analysis closely

followed Creswell's (2007) design of organization, familiarization, coding, description, presentation and interpretation.

CHAPTER IV

PRESENTATION OF THE DATA

In this chapter, I present the quantitative and qualitative data collected from multiple sources including instructor and student surveys, class observations, focus group interviews and course documents. The story that emerges is divided into faculty perspectives and student perspectives/realities. I start by familiarizing the reader with an overview of the National Education Act and educational management in Thailand and at Prince of Songkla University (PSU). To protect the privacy and confidentiality of my focus group participants, I use pseudonyms and limit their biographical information.

Overviews of the National Act and Education Management in PSU

Higher Education in Thailand started during the reign of King Rama V approximately 136 years ago. It has been developed over time with a major change in 1992 when the government issued the National Education Act. This act defines education as "the learning process for personal and social development through imparting of knowledge; practice; training; transmission of culture; enhancement of academic progress; building a body of knowledge by creating a learning; environment and society with factors available conducive to continuous lifelong learning" (The Ministry of Education, 1999, p. 2). Therefore, education management in PSU has been focused to achieve the goal of National Educational Act.

Since 2000, the university promoted self-directed and lifelong learning, requiring that new courses should be assigned credits for self-directed learning. Moreover, the university has invested a lot of money to provide an infrastructure for online courses to promote lifelong learning. Since then, the number of online courses (hybrid) has increased. Now there are 325 courses, offered in both undergraduate and graduate levels (Educational Service Unit, Prince of Songkla University, 2008).

PSU has spent a lot of money for teacher training and provided some grants and incentives for teachers who want to create online courses (hybrid courses). In 2004, the university intended to promote online courses and to have an infrastructure for online courses. The department of Computer Engineering was assigned to create a system called Virtual Classroom (VCR) in order to serve the increasing number of online courses and the department was also responsible for training courses to equip the instructor who wanted to have online courses.

The department of Computer Engineering also offers training. For new instructors or instructors who were interested in having hybrid courses, there are training courses about how to use Virtual Classroom (VCR), download materials, chat with students and contact students. There was also a Media Stream training course for instructors who wanted to use a video and post it in VCR. However, the VCR was broken down in December 2008. This caused a big problem to instructors and students because all hybrid courses were affected.

The university quickly provided a new system which is called LMS, learning management system (LMS@psu). This new system has been launched to replace VCR and many training courses are being launched to equip instructors who have hybrid

courses with this new system, such as LMS training courses or Adobe Presenter training courses (E-learning Center Project, Prince of Songkla University, 2009). The new system has been set up to be an infrastructure for hybrid courses in PSU, Hat Yai Campus.

The university provides a grant, giving about $ 138 per one credit or an hour for instructors who want to have hybrid courses. And the faculty in which the instructors are working provides an equal grant for having a hybrid course. However, the instructor could apply only once either from the university or the faculty and once for one subject (Educational Service Unit, Prince of Songkla University, 2008).

Faculty Perspectives

The survey, class observation and course document could reveal some interesting aspects of instructor perspectives.

Demographic Information

The respondents to the faculty demographic survey (52 total; 40% response rate) provided the demographic information. There were 35 female instructors (67% of the total) and 17 male instructors (33% of the total). Seven instructors reported that they worked in PSU less than five years, six teachers taught in PSU about six to ten years, ten teachers about 11 to 15 years and 25 instructors more than 15 years.

Types of Courses

When asked about the types of courses the instructors teach, they reported differently. Seven instructors told me that they taught only hybrid courses and 20 teachers taught only traditional courses. Moreover 25 teachers had both types of courses.

Hybrid courses. The instructors completing the survey reported that they had offered 74 hybrid courses in different semesters. They gave information about the activities they designed, the frequency of class meetings and the evaluation they used to assess the students.

The activities that the instructors provided for the students were downloading course documents via the VCR, posting or reading announcements, submitting or doing some assignments, assigning students to surf the internet for the information before or after class, talking with the students via the internet and doing online quizzes. The activities that the instructors do the most were downloading documents (90%), posting or reading announcements (75%) and submitting assignments or doing some assignments (61%) respectively. The activity which the instructors used the least was online quizzes. One instructor offered that the reason for this might be students' cheating behavior.

Many instructors reported that they had the class meetings with different frequency. Some met students once a week (12%), twice a week (38%), three times a week (22%), and once a month (3%).

Most teachers (84%) reported that they used the midterm and final exams to evaluate the student performance. Few instructors (16%) assigned marks for VCR activities. Moreover, few instructors (3 %) said that they provided quizzes, assignments, field trip and reports, reports, individual and group work to assess the student performance.

Traditional courses. From the instructor survey, the teachers reported that they had offered 91 traditional courses. They described activities they designed for the student and assessments of student performance.

Most of the teachers (90%) believed that traditional classes provided students more chances to talk with the teacher before or after class. Also, most teachers (89%) had students do some assignments, take quizzes or submit assignments in the class. Many teachers (86%) delivered lectures in class, had students present their work or do pair work or group work in class.

Many teachers (76%) used quizzes and assignments as tools to grade the students. Moreover, many teachers (71%) provided final examinations and 67% used mid-term examinations as their assessments. Some (47%) had class attendance and 53% used individual and class participation as a means to evaluate their students.

The data from the classroom observations supports the data from my instructor survey. The instructors of both types of courses had the same performance in delivering lectures and interactions with students.

Opinions on the Most Important Things in Learning and Teaching

When I asked all the instructors about the most important things in learning and teaching, they expressed their views differently as shown in Table 6.

Table 6

Opinions about the Most Important Things in Learning and Teaching

Items	Agree		Disagree		Total
	%	n	%	n	52
instructor's knowledge and expertise	77	40	23	12	
interaction between an instructor and learners	73	38	27	14	
learner's responsibility in learning	71	37	29	15	
teaching techniques	71	37	29	15	
subject-matter content	62	32	38	20	
relaxing classroom environment	52	27	48	25	
inquiry techniques	46	24	54	15	
learner-centered	44	23	56	29	
collaboration between an instructor and learners	44	23	56	26	
intrinsic motivation	35	18	65	34	
teacher-centered	8	4	92	48	
Other factors which are important e.g. facilities for students or student determination	4	2	96	50	
formal classroom environment	2	1	98	51	

Most instructors reported that they believed that instructor knowledge and expertise, interaction between teachers and learners, learner's responsibility in learning and teaching techniques and subject matter contents were essential in teaching and learning. However, the teachers did not believe that being teacher-centered, and providing other

things such as facilities for students and student determination and formal classroom environment were important in learning and teaching.

Class Observations

I observed three hybrid courses and three traditional courses twice. The first visit for each course was in August and the final visit was in September. I sat silently in the back of the classroom and used the observational checklist to report what was going on in each class. And I visited the class second time for some missing information. In this section, I described each teacher in terms of classroom environment, interactions between teachers and students and other realities found in the classes.

Traditional classes. The first teacher started the class on time and some students waited for the teacher. The psychology class I observed was at 11 a.m. The teacher greeted the students and began her lesson. She let the students watch a video, and then she threw out discussion questions. Some students shared their ideas but most of them kept silent. They listened to their friends' discussions attentively. Few students responded to their friends' discussions. In the second observation, the teacher started the class on time, which was 11 a.m. Few students were late. The teacher delivered the lecture and the students listened to her and wrote down what she said. When she finished the class, the students left the class immediately. No one asked her questions. The teacher told me that she gave the course description, course outlines, materials and course evaluation to the students in the first hour of the semester. And, it was possible additional materials might be given in class. There were 77 students who enrolled this course, but from my two visits I found that there were about 30 students attending the class.

The second teacher had a morning class, 8.00 a.m. This class was about soil. Students kept entering the class. Students who were late were assigned to sit in the first row. Before the teacher started the class, he distributed the student name list and had them sign their name and passed it to their friends. The teacher used PowerPoint. Students listened quietly and took some notes. There were about 80 students in the class. While the teacher was teaching, some students were talking with friends. The teacher called some of them to answer the questions. The students had the textbooks written by the teacher. They bought it when they began to study this course. The students had to bring the book when they came to the class. When there were five minutes before the class finished, the teacher randomly called the student names to check their attendance. In the second visit, the mid-term examination was approaching. So, there were more students than the first observation, about 100 in class. The teacher did not give the lecture but he emphasized the main points that would be in the exam paper. The students listened attentively and few talked with friends. The teacher did not check the student attendance.

The third class was in the evening. It was about metal plating. Students were waiting for the instructor. Some students helped the teacher carry equipment for demonstration. The teacher started teaching with PowerPoint and then gave a demonstration of a process of melting some substances and allowed the students to participate. He told the students that he knew their weak points, so he gave some calculation exercises to help students improve their calculating skills. The technique the teacher used to encourage the students to answer or to speak was to deduct their marks from the total. Also, when I observed the class the teacher had students do an impromptu quiz. One student who was my focus group participant told me that she loved this class

because there were some quizzes in class which helped improve her understanding and class attendance marks stimulated her to attend the class. When the students did the quiz, the teacher walked around the class and encouraged the students to do well in the quizzes and mid-term exam. There were about 30 students in this class. And the teacher repeatedly stressed his expectations for this course. When I attended this class for the second time, I found that the teacher did the same thing as I had seen in the first observation. He gave the lectures, let the students do the exercise and walked around to check their understanding.

Hybrid courses. The first hybrid course I visited was a two hour class, starting at 1.00 in the afternoon. This class was about digital systems. The first teacher began the class by continuing the lessons he had not finished from the previous class. He did not ask students about activities or materials in VCR. He took control of speaking. He was lecturing and students were listening to him. He did not mention about the previous knowledge or lessons. The students were not on time. They kept entering the class but the teacher did not mention anything about their lateness. His voice was monotonous. Some students listened to him but some took a nap in class. He kept teaching until he finished the class. In the second visit, I observed that this instructor did the same thing as he did in the first observation. He started his lecture and he did not pay attention to the students. They were very late. The number of the students from the first and second observation was about 30, but there were 60 students who enrolled this course. One of my focus group participants told me that this course was not difficult for him and he could study by himself. He attended the class because the teacher did not complain about the students' behavior and students could do whatever they wanted in this class. After the class visit, I

asked the teacher about the course materials. He told me that he had posted course outline, description and class schedule in VCR before he started the class.

The second hybrid course was a morning class, starting at 8.00 a.m. It was a Thai medicine class. I observed this course one week after the mid-term examination. The teacher assigned the students to sit in a group of eight. There were eight groups of students. The students who were ten minutes late were not allowed to enter the class. Before he started his lesson, he asked the students how they felt towards the mid-term examination. The students told him that the exam was very difficult and then the teacher informed the students that they had problems with the integration of science and social sciences. So he explained them briefly how to do it. This teacher asked some questions linking to students' previous knowledge and applying it to what he was teaching. He talked about key points and had the students read details of the lessons later. He asked the students some questions but the students could not answer them. So, he told the students to read more and tried to answer his questions. The teacher uses PowerPoint to explain what he was teaching. The students also downloaded the materials and took them in class. They were ready to study. While the teacher was teaching, they took some notes. In the second observation three weeks later, the teacher did the same thing as I found in the first observation. The students had downloaded the materials and they were ready to study and answer the questions. One of my focus group told me that she likes hybrid courses because she could download colorful pictures and this made her understand the lessons. When I asked the teacher about the course materials, he also mentioned that all his teaching documents were posted in VCR, including the course description, course outline and course evaluation.

In the third hybrid class, the class was an afternoon two hour class and was about human resources. On the day when I visited, the teacher had the students post the topics they were interested in before the class. On the day of the class the students presented their interested topics to the class. Other students summarized what they learned from their friend presentations. The students also had a chance to choose when they wanted to present their topic. She also mentioned about the questions which some students posted and explain them to the students. She told the students that if they had questions and were afraid to ask in class, she suggested that they post the questions in VCR. The number of students in this class was about one hundred. Before the students' presentations, the teacher gave a short lecture on the topic the students were going to present. When each group presented their work, others listened to their friends' presentation attentively. During the presentations some students were walking in and walking out. But when there was 15 minutes left, the teacher told the students to brief their friend's presentations, what they learned and submit the brief to her before leaving the class. In the second visit of her class, the exam was approaching. So in this class, she answered the questions posted by the students in VCR. After that she gave a brief overview about the contents that she had taught. The students listened to her attentively and jotted down the information. The class took about one hour and the teacher let the students go to prepare for the coming mid-term examination.

Student Perspectives

The student surveys, class observation and focus group interviews could disclose some interesting aspects about student perspectives of both traditional and hybrid courses.

Student Demographics

There were 231 students completing the surveys with different sex, age, faculty and year of study (231 total; 47% response rate). Most of respondents were female (74%) and many of them (84%) were in the age of 20-22 years old. Some of them were in the age of 17-19 years old (15%) and few of them were in the age of 21-25 years old (1%). Most of them studied in the faculty of Management Sciences (35%) and in the faculty of Natural Resources (32%). Some were in the faculty of Science (16%), in the faculty of Thai Traditional Medicine (13%), the faculty of Economics (4%) and the faculty of Medicine (1%) respectively.

Half of the respondents were in third year, approximately a third (36%) were in the second year, 12% was in the fourth year, 1% was in the fifth year and only one student was in the first year and two students did not specify the year of study.

Student Responses

The respondents reported the types of courses in which they studied, the activities they participated in for each course, their course preferences and reasons and their self-directed characteristics.

Course studied. When asked about the hybrid courses the respondents had studied, the respondents (229 respondents because two respondents did not give any information about the types of courses they studied.) reported that they had studied 122 hybrid courses since they embarked in PSU. Also 222 students reported that they had studied 132 traditional courses as they began studying in PSU. Two hundred and twenty-nine students who had experience in studying hybrid courses described the activities they had performed. Most of students (69% and 65% respectively) used VCR as a means to

download documents and post or read announcements. Some respondents (40%, 38% and 30%) searched the internet for the information before/after class, submitted assignments/did some assignments on line, studied some materials, and did an online quiz respectively. Few students (19% and 12% respectively) talked with the instructors via the Internet or chatted with friends.

Two hundred and twenty-two students who studied 132 traditional courses reported about their activities. Many students (80%, 77% and 64%) told me that they attended classes to do or submit assignments or quiz, had a presentation or did pair work or group work respectively. It seemed that few students (48%) preferred to talk with teachers before or after class.

Course preference. When asked about the types of courses the students preferred, the respondents reported differently. Some (40%) said that they preferred hybrid courses. Many (65%) said that they have more flexibility in learning and 51 % of students enjoyed learning new things via the Internet. Only some of respondents (41% and 40%) mentioned that they liked hybrid courses because they were more active and had more responsibility in learning. Also, some respondents (25% and 22%) said that with hybrid courses they have more interactions with friends and an instructor and they had more self-control. Moreover, the other reasons that the respondents liked on-line courses were because it was easy to repeat the lessons, reliable news and announcements, communicate with friends and instructors, and they could study at home.

However, more than half of the respondents (60%) preferred traditional courses and for different reasons. Most of students (70%) said that they liked traditional course because they needed an instructor's help. Many (56%) believed that external motivators,

for example, good grades) were very important. A lot of respondents (52%) reported that they loved traditional courses because they liked attending lectures and they could ask the instructors immediately if they had any questions. They believed that with the instructor's expertise and knowledge, they could learn very well. Some said that attendance marks motivate the students to attend class.

Learning characteristics. The Part II of the student survey developed by Guglielmino (1977) was designed to measure learner characteristics. This part consisting of 58 items revealed the respondents' characteristics which were in line with student course preference. The SDLRS with 58 items used the Likert-type scale ratings:

5: Almost always true of me; there are very few times when I don't feel this way,

4: Usually true of me; I feel this way than half the time,

3: Sometimes true of me; I feel this way about half the time,

2: Not often true of me; I feel this way less than half the time,

1: Almost never true of me; I hardly feel this way.

Of the 58 items, 41 items were about self-directed learning characteristics and should be scaled positively. The items were expected to receive a 4 or 5 high rating from the respondents: 1, 2, 4, 5, 8, 10, 11, 13, 14, 15, 16, 17, 18, 21, 24 25, 26, 27, 28, 30, 33, 34, 36, 37, 38, 39, 40, 41,42, 43, 45,46, 47, 49, 50, 51, 52, 54, 55, 57 and 58. The remaining 17 items (3, 6, 7, 9, 12, 19, 20, 22, 23, 29, 31, 32, 35, 44, 48, 53, and 56) should be reverse scored to show support for self-directed learning characteristics. When all items are scored to report self-directed learning, the highest possible total score will be 290.

Table A presents a summary of results (See Appendix D). This table shows the item numbers, the frequency count of the ratings for each item (reverse scored items are

in italics) and the percentage rating which confirmed support for self-directed learning characteristics. Scores of 4 and 5 were combined showing support for self-directed learning. Cumulatively, 5% of the items responses (3 of the 58) supported self-directed learning characteristics at a level of 50% or more. On average, 15% of all item responses reflect self-directed learning characteristics.

When calculating the total score, I found that the learner characteristics became much clearer. The lowest score recorded in this study was 158 and the highest score was 262. The lowest score meant that the learners had a tendency to depend on the instructors and could not control themselves to learn. The highest score meant that the learners possess self-directed characteristics (Guglielmino 1977). Nearly half of respondents (49%) had the range of the score of 177-201, which is below average, indicating teacher-directed characteristics. Some students (34%) received the range of scores between 202-226, indicating average self-directed learning characteristics. Table 7 presented the classification system used by Guglielmino (2008) and the number and percentage of scores from this study that fall into each classification category.

Table 7

Comparison of Respondent Scores with Self-Directed Learning Readiness Scales (SDLRS) Interpretation Guidelines

Classification	Score	N for sample	% for sample
Low	98-176	13	7
Below average	177-201	112	49
Average	202-226	84	34
Above average	227-251	20	9
High	252-290	2	1

From the table, it showed that most of participants (56%) possessed low and below average self-directed learning characteristics, and some (44%) had average, above average and high self-directed learning characteristics.

Focus Group Interviews

I purposively selected 24 participants from hybrid and traditional courses to participate in focus group interviews. Half were successful in these courses and earned high passing grades. Half were unsuccessful in these courses and earned low passing grades. Of the 34 invited to be interviewed, 21 participants actually participated. The student demographics are presented in Table 8.

Table 8

Participant Demographics

Name	Sex	Age	Level of Student	Faculty (College)
Ellis	F	19	2	Engineering
Elton	M	19	2	Engineering
Elisa	F	20	2	Engineering
Edmond	M	20	2	Engineering
Mona	F	19	2	Management Sciences
Molly	F	20	2	Management Sciences
Malee	F	20	2	Management Sciences
Moo	M	20	2	Management Sciences
Sylvia	F	22	4	Science
Sea	F	23	4	Science

Name	Sex	Age	Level of Student	Faculty (College)
Simon	M	24	5	Science
Sandra	F	22	4	Science
Soil	M	22	4	Science
Nice	F	20	3	Natural Resources
Nancy	F	20	3	Natural Resources
Neal	M	21	3	Natural Resources
Natty	F	20	3	Natural Resources
Ton	M	21	3	Traditional Thai Medicine
Tracy	F	21	3	Traditional Thai Medicine
Thomas	M	21	3	Traditional Thai Medicine

I used pseudonyms for all participants to protect their rights. The initial letter indicated the faculty (college) in which the students studied. For example, Ellis was a student in the faculty of Engineering. There were 8 participants who were junior and 8 were sophomores. Four were senior and one was in the fifth year. Twelve were female and nine were male. They studied in five different faculties.

Realities for Success

The participants discussed widely the factors which helped them succeed in studying courses. From the focus group interviews, the participants revealed two groups of factors they believed to help them succeed in learning. The first relates to learners and includes class attendance, studying before and after class, preparation for the exam, good relationships with instructors, study groups, dependence on friends and time

management. The second relates to instructors teacher expertise, faculty teaching style, and the use of educational technology.

Learner Factors

The participants reported differently about the factors that help them success in learning. They can be grouped as follows:

Class attendance. All participants agreed that class attendance is important to help them succeed in learning, as Natty said "I always attend the classes, take notes while studying and review the lesson. I pay attention to the lectures. If the teacher emphasizes one topic, I will mark it and study for the exam." Tracy stated that, "I attend the classes and try to understand all points the teacher teaches in the class as much as possible and after the class I review all the lessons I learn each day." Sylvia reported that, "I always attend the classes but I don't take notes. After the class, I borrow my friend's notes to copy. I write the notes in my own lecture notes. This way helps me strengthen what I have learned in class."

Studying before and after class. Ellis said, "Studying before each class and after class is important for me" and she added that "I always review what I have learned and I pay attention while studying. Elton agreed with this idea and said that "If one course I take is very difficult, I spend much time in preparing."

Good Relationships with the Instructor. The participants informed the researcher that the instructor is a very important factor that helps them learn. Sandra said, "I can get along well with the instructor so I don't feel tense and frightened. I feel very relaxed so I can study this course very well. If I have a good relationship with the teacher, I can ask her some questions directly and have her explain them to me individually." Elton added

that “if I have good relationships with instructor, I’m not afraid of asking the teacher for help if I have a difficult learning problem.”

Preparation for the exam. Many students reported that preparation for the exam is very important for them to succeed in learning. Some participants confessed that they did not pay much attention in class but they spent much time preparing before the exam and that preparation for the exam helped them learn. Sylvia told me that, “I don’t pay much attention to the lectures but I prepare myself for the exam at least two or three weeks before the exam.” Also, Mona added that, “I also do not pay attention while I am studying. Sometimes I talk with friends or I purposely cut a class. So, preparing before the exam is very important for me. I will gather all information about the subjects I have learned and study.” Moo agreed with Mona adding that , “I am quite lazy. I don’t like attending the classes. But I prepare myself before the exam. I have a study group and copy my friends’ lecture notes to read before the exam.” Nathan agreed with his friends’ ideas and said,

> I sometimes have daydreaming. If I am not interested in one course, there is no motivation to study. When the exam is approaching, I have to study more and try to solve all learning problems. I spend one week preparing for the exam. I sometimes spend one day reading and the next day I take the exam.

And Thomas added that, “I do like others. I will read the textbooks when the exam approaches. “If I read earlier, I think nothing stimulates me to study. All the courses I study need to be memorized. If I memorize the course contents earlier before the exam, I might forget all.”

However, one participant, Tracy, told me that she had to prepare well for the exam because her subject-matters were very difficult and need memorization, “I myself never prepare before class because all the course content need to be memorized. However, I have to download all the materials from the Internet. So I attend the class and after the class I sometimes review the lessons. When the exam is approaching, I will spend more time reading all the course materials.”

*Study group*s. Some participants reported that a study group helped them succeed in learning. Nancy said, “For some courses, I have a study group. When the exam is approaching, my friends and I will gather to study and share the contents we have learned. We help each other.” Moo agreed with Nancy and added that “I also have a study group. My friends and I gather to read books and share the knowledge.”

Dependence on friends. Some told me that they were not diligent in studying but they ask for help from their friends as Nancy mentioned that, “I am not diligent in studying but I try to read more, take some notes and ask friends if I have questions.” Nice said that, “I do not pay attention in class but after class I will write mind maps to help me understand the lessons and ask my friends to explain some lessons.”

Time management. There was only one participant believing that his ability to manage the time was his learning characteristics and helped him succeed in learning. Ton told me, “I am not a good type of students. I both study and do extra curricular activities but I can manage my time.”

However from the focus group interview, only one of my participants told me that success in learning could not be evaluated by grades. For him, he got an A in some courses but he gained nothing from those courses. He believed that students who were

successful in learning were the ones that could apply what they had learned in class to their work after learning. For him that was the real success.

Teacher Factors

The focus group participants reported that not only learner factors affected their success in learning but also the teachers as well. The teacher factors can be grouped as follows:

Teacher expertise. Eleven participants agreed that the teacher was very important in class. Sylvia told the group that, "The teachers are important because they have more experience, knowledge and techniques. So they can give us some guidelines of what to do in the future. They can control the students and give the students some techniques to learn or memorize something." Sea mentioned that, "Teachers give us some hints which motivate students to further studying." Also, Simon said, "Teachers know more than the students and should deliver what they have already known to the students. If we enter the room with no teacher, we will find chairs and we don't know whether what we learn by ourselves is accurate or not." Mona told the group that, "The teachers are motivating factors influencing students to learn and attend the class." Soil agreed and added that, "If there is no teacher, I don't know with whom I will study. Online courses are suitable for students who love working with computers. But if the students don't like computers, they need teachers to teach."

Teaching style. Molly told me that, "The teacher's teaching style is very important. If she explains the content thoroughly and clearly, it will be easy for the students to be able to understand the lessons and if she delivers with interesting teaching style, I will study more and get more knowledge in that topic". Tracy mentioned that, "If

the instructor just reads the materials, it won't help student's learning. But if the teacher has an interesting style, it will help students to learn." Soil also believed that teaching style was important. He said, "If the teacher enters the class, give the lecture and explain the contents, the students in the back of the class will fall asleep and it is very boring. The teachers should do anything that stimulates the students to learn." Simon agreed adding that "the way the teacher teaches and the way the teacher speaks sometimes make me feel bored with learning. And the teacher should motivate the students to learn". Moreover, Thomas believed that, "Teachers give lectures and students listen to the lectures and note down the subject matters. I like this way of teaching. I don't like class interruption, asking questions while the teacher is teaching. I think the teacher should lecture all the contents and when s/he finishes, it is time to ask questions."

Use of educational technology. "Educational technology is very also important. Some instructors use PowerPoint in teaching, and presenting some topics. I learn a lot" recounted Nathan. Sea said that "Using a video in one topic makes the lessons more interesting than using only PowerPoint." And Nice confirmed that "If the teacher uses only the overhead projector in teaching, sometimes the students can't write down all the information. But if the teacher uses other teaching technology, students may learn and understand more."

The participants believed that those two factors helped them succeed in learning. Learner factors mainly relate to student learning behaviors and teacher factors relate to the instructors themselves and instructions.

Academic Success

The descriptive data was gathered from the Office of Registration, PSU. There were 237 students who enrolled in hybrid courses from three faculties, the faculty of Management Sciences, Traditional Medicine and Engineering. It was found that 156 students got B+ or higher grades which were about 65 % of the total. However, there were four students earning D or lower (about 3% of the total).

Also there were 237 students studying traditional courses in three colleges, the faculty of Liberal Arts, Science and Natural Resources. Twenty nine per cent of students enrolling in these courses received B+ or higher grades. And there were six students getting D or lower (8% of the total).

However, the number of students who withdrew from hybrid courses was nearly the same to those who dropped traditional courses (3%). Withdrawal from the course means that the students were likely to get a poor grade or even fail.

Coursework Type and Benefits

The participants also described the coursework types and benefits which they believe are very important for them, help them learn and succeed in studying. The topics can be grouped as follows:

Hybrid Courses Benefits

When the participants talked about the types of courses they preferred, they revealed some interesting ideas. Six participants from 21 participants stated that they liked hybrid courses and described the reasons why they liked as follows:

Ease of access to information. Ellis said, “Hybrid courses make my learning easier. Before the class, I can read or prepare the lessons by downloading from the

Internet. Moreover, I get the information through the Internet. So after the instructor posts some news, students can get it immediately." And Elton shared this idea. He said, "I can download the materials and use them while the teacher is teaching."

Learning resources. Ton mentioned that, "I like hybrid courses. I like it a lot when I surf the Internet and find the information that makes me understand the lessons more." Moreover, Nice added that, "I can check or study new information or knowledge from the Internet. I have more chances to relearn the lessons or to get new information the instructor posted in the web." And Nathan told me, "I can learn more with hybrid courses. I can learn not only from the teachers but from other sources of learning. These help me understand the lessons more. In addition, the instructors motivate me to learn by suggesting some topics and let students study themselves."

Self-paced learning. Neal reported that he liked hybrid courses. He said, "I can learn by myself. This helps me understand the lessons more." He also added that, "I need to have full responsibility in learning. If the instructor posts the assignment, I have to check the date due and submit my work accordingly."

Flexible learning. Moo said that he liked hybrid courses. He told me, "I like hybrid courses because I don't have to attend the class. I can read and review my lesson via the Internet. I think these courses suit my learning style."

Traditional Course Benefits

Twelve participants who said that they preferred traditional courses gave some reasons, as follows:

Structured learning setting. Nancy informed me, "I like traditional courses. If I download the materials and have learning materials with me, I do not pay attention to the

lecture and I will start chatting with friends. So, attending the lectures and listening to the instructors in class help me take notes and memorize the lessons." Sea agreed and added that, "I am not very disciplined. I can't study without the instructors." Elisa also added, "In class, the teacher will control me and I have more concentration." Moreover, Malee said that, "I don't like studying through VCR. I need someone to control my study. When the teacher is in the class, I can understand the lessons." Natty agreed with other participants and she mentioned that, "If the teacher is in the class, s/he can pull me back from day dreaming. Also, Soil said, "If there is no teacher in class, I feel that it is not a classroom. With the teacher in the class, it is a real classroom for learning."

Spending time with friends. Simon confessed that, "Although the instructors make me feel bored, I can spend my time with my friends in class."

Instructor's knowledge and expertise. Thomas added, "I like traditional courses because the teachers teach the courses themselves. So they can deliver what they know to the students."

Teacher-centered learning. Moreover, Sylvia told the researcher that, "I like having an instructor in class. The instructor will tell me everything. I can see the teacher's body language. This helps me to understand the lessons." Malee agreed and added that, "I like it when the instructors deliver the lectures in class. I can listen to them attentively and take notes. I don't have to spend much time preparing for the exam."

Immediate assistance. Natty said, "If I have questions, I can ask her/him immediately." Edmond further stated, "The teachers can help me solve mathematical problems."

Benefits from Both Hybrid and Traditional Courses

Three students reported that they preferred both types of courses. They used Internet as a tool to download the materials and to review the lessons. Molly said, "I like both types. If I download the materials from the VCR, I can get only the topics the teacher is going to teach. So with the teacher's explanation in class, I can understand the lesson more." Also, Mona added that, "I think the teacher plays important role in teaching and learning. I can download the materials from the computer. But attending the lectures helps me understand the lessons." And Tracy agreed, "I like both types. At my faculty, the teacher will give a lecture by providing more information based on the materials downloaded from the computer. I like reading from the Internet because sometimes teachers upload colorful pictures. If I print the materials containing these pictures and reread it, sometimes it is quite boring. However, I like reading the materials via the Internet and after reading, I download the materials and attend the lecture. This makes me understand the lessons."

Many participants preferred traditional courses because they believe that these courses help them learn and be successful in learning. They thought that structured learning setting, spending time with friends, teacher knowledge and expertise, teacher-centered learning, and immediate assistance of traditional courses were very important for them to learn.

Some love hybrid courses. They believed that the ease of access to information, learning resources, self-paced learning and flexible learning were advantages which they gained from learning those courses.

A few love both types. They thought that the ease of access to information and teacher knowledge and expertise were benefits from both types of courses.

Learner Characteristics

From the focus group interviews, I found learner characteristics emerging from the data. The themes were as follows:

Positive Attitude to the Course and the Instructors

Nancy told me, “I must control myself to love the course I study and the teacher teaching that course so that I can study that course. Sometimes when I am not happy with the teacher, I don’t want to study anymore. I must like the teacher and the courses and pay attention to those courses. If I have bad grades, it will affect me a lot.”

Self-Control

Some said self-control in studying was important. Sylvia said, “I must control myself because some days I might want to study and some days I might feel lazy.” Soil agreed with Sylvia and added that, “If the teacher has a quiz, I will not miss the class. I sometimes need something to motivate me to study.”

Concentration in Learning

Malee said, “If I attend the class but I can’t concentrate on the lectures, I learn nothing.” Moo agreed with this idea. He mentioned that, “If I can control myself to study, I can study very well.” And Neal said, “Concentration is very important. If I have concentration, I can study well in some courses.” Sea agreed with this idea. “I agreed

with Neal. If I attend the classes, take notes and review the lessons, I will succeed in studying."

Self-Prepared for the Future

I learned that when the participants were in higher levels, junior and senior. They tended to focus on their future, what they were going to do when they graduated and they seemed to possess self-directed characteristics. Sylvia told me that, "My elective courses are very advantageous for me. I choose them according to my interest. I think these subjects will give me some knowledge suitable for my future work." Also, she added that, "When I started my third year, I prepared myself for the job when I graduated. I try to look for a job in the Northeast because my family had just moved there. I spend two hours from 7.00-9.00 p.m. every night to search for the information I am interested in." Mona agreed adding that "my minor is shipping. So, I want to know more than what the teachers have taught in class about shipping."

I found that the participants who thought that being self-prepared for the future were the third years. They reported that they had to prepare themselves for the future career.

Differences by Academic Faculty

The data from the instructor survey and class observation showed differences by academic faculty. I found two differences: the tendency of having hybrid courses and instructional strategies.

The Tendency of Having Hybrid Courses

The instructors who completed the survey can be classified into four groups according to the length of time they have been working. Table 9 presents the information the length of time the teacher have been working and the courses they have.

Table 9

Length of Time and Types of Courses

Length of time	Types of course						Total
	Hybrid		Traditional		Both		
	No.	Per cent	No.	Per cent	No	Per cent	
Less than 5	0	0	1	14	6	87	7
6-10	1	14	4	67	1	17	6
11-15	3	30	2	20	5	50	10
More than 15	3	10	13	45	13	45	29
Total	7	14	20	39	25	48	52

From the table, I found that the teachers who have been teaching for 11-15 and more than 15 years tend to have more hybrid courses than any other group of teachers.

Instructional Strategies

The data from the classroom observations revealed different instructional strategies. If there were more than 60 students in the class, the instructors used lectures, for example classes in the Faculty of Engineering, in Faculty of Management Sciences, in the Faculty of Traditional Medicine and the Faculty of Natural Resources. But in the psychology class with 77 students in the Faculty of Liberal Arts, the instructor used a

different instructional style, starting with watching a video and following by a discussion. This teacher had to work hard to encourage the students to speak.

However, I found that there were about 40 students in the class in the Faculty of Science. The instructor used many different instructional strategies to help the learners learn, lecturing with a PowerPoint, doing exercises individually, demonstration and discussion.

So, it seemed that the teachers who have been working in PSU for 11-15 and more than 15 years are likely to have more hybrid courses. And the number of students in the class can influence the instructional strategies as well.

Summary

From multiple sources of data, the descriptions of instructors, students and courses become very clear. The instructors also reported that they have both types of courses, traditional courses and hybrid courses. They provided different activities for both types but the assessments for both courses were the same, which were a mid-term and a final exam. Regardless of whether the instructors taught traditional or hybrid courses, they believed that the interaction between an instructor and learners, learner's responsibility in learning and teaching were the most important thing in learning and teaching.

Students, on the other hand, were eager to have teachers set boundaries for classroom while at the same time they enjoyed searching information to learn more and to satisfy their need. One striking characteristics of the students was a lack of self-control. Many participants wanted the teacher to control their learning. And the students believe that teachers are important in learning and teaching. They depend on the teacher expertise

and knowledge. They do as the teachers tell them to. That is why the participants see that class attendance and preparation for the exam are very important.

Interestingly, the students who studied hybrid courses got higher grades than those who studied traditional courses.

From my observation of both traditional and hybrid courses, I found out that there were no differences between hybrid and traditional courses in terms of teaching, and classroom interactions. The instructors of both types of courses delivered lectures and took control of speaking. But, hybrid courses provide more channels for teachers and students to communicate with each other.

Some differences can be seen from the academic faculty. The instructors who have worked with PSU for a long time tend to change their course type, having more hybrid courses. And instructional style also depended on the number of the students in the class.

CHAPTER V

ANALYSIS OF THE DATA

The data collection for this study was carried out over a period of five months, starting in July to November 2008 and the analysis was conducted between December 2008 and January 2009. Quantitative data were analyzed with SPSS (Version 11.5, Babbie, Halley & Zaino, 2003). Raw scores from the instructor and student surveys were tallied. Scores from the SDLRS were statistically analyzed for construct validity and items were used to analyze the respondents' self-directed learning characteristics. Items rating were also compared with the qualitative responses from class observations and focus group interviews. In this chapter, I present my analysis and the finings.

Course Design Preferences

Of 231 respondents, 138 (60%) told me that they loved studying traditional courses and 91 students (39%) reported that they preferred hybrid courses. Two respondents did not inform me their course preference. Table 10 presents the self-directed learning characteristics scores of students loving traditional and hybrid courses.

Table 10

Comparison of Self-Directed Scores of Students Preferring Traditional and Hybrid Courses with SDLRS Interpretation Guidelines

Classification	Score	Types of Courses			
		Hybrid		Traditional	
		Number	%	Number	%
low	98-176	4	4	9	7
Below average	177-201	42	46	68	49
Average	202-226	37	41	47	34
Above average	227-251	7	8	13	9
High	252-290	1	1	1	1
	Total	91	100	138	100

From the table, it revealed that 56% of the students who liked traditional courses and 50 % of the students who liked hybrid courses had the ranges of score low and below average. It showed that they had low level of self-learning characteristics. They tended to be teacher-directed. There is not much difference in the percentage of the two groups of students who have average, above the average or high self-directed learning characteristics (50 % of students preferring hybrid courses and 44% of students preferring traditional courses respectively). Moreover, Guglielmino (2008) confirms that learners with below average SDLRS scores usually prefer structured learning situations, for example, lectures and traditional classroom settings.

Then I compared the maximum and minimum of the two groups and used t-tests to see whether there are any differences between the two groups. Table 11 shows the maximum and minimum score of the two groups. There is little difference between the maximum and the minimum of the two groups.

Table 11

Scores of Participants who Preferred Hybrid and Traditional Courses

Descriptive Statistics					
Type of course the participants prefer	Number	Minimum	Maximum	Mean	S.D
Hybrid	91	164	262	202	17
Traditional	138	158	235	201	18

Then, I used a t-test to measure the difference of self-directed learning characteristics between the students preferring hybrid courses and students who liked traditional courses. The independent variables were types of courses which the students preferred and dependent variable was self-directed learning characteristics. I found that there was no statistically significant difference between the two groups of the students (t=0.543; sig=0.587; significant level 0.05).

I also employed descriptive statistics to describe student self-directed learning characteristics in different years of study. The result was presented in Table 12.

Table 12

Descriptive Statistics of Students in Different Years

Year of study	Mean	No.	Std. Deviation	Minimum	Maximum
1	205	1		205	205
2	204	82	16	162	245
3	201	115	18	158	253
4	196	28	19	171	262
5	206	3	19	187	224
Total	202	229	18	158	262

From the table, considering the mean score, I found that the fifth-year students seemed to have the most self-directed learning characteristics. It was possible they had to study hard and be very serious in learning to graduate. And then, the first-year student has more self-directed learning than the second and the third year students. It seemed that they just started studying in the university and everything seemed very attractive to them. Surprisingly, the students who were in the fourth year had the least self-directed learning characteristics. It seemed that they might focus on learning to graduate and they might not spend much time on other interesting activities.

I then used ANOVA test to see the relationship between the year of the students study and self-directed learning characteristics. The independent variable was the level of study -for the students and the dependent variable was self-directed learning characteristic. The result was presented in Table 13.

Table 13

Analysis of Variance for the Year of the Students

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1318.522	4	329.630	1.049	.383*
Within Groups	70398.544	224	299.353		
Total	71717.066	228			

*Significant at 0.05 level

However, there is no statistically significant difference. The level of year students study does not influence student self-directed learning.

Furthermore, the qualitative data from the focus group interviews confirmed this finding. There were 12 participants (57%) informing me that they preferred traditional courses. The reasons why they liked traditional courses were lack of self-control, the need of instructor's knowledge and expertise, spending time with friends and preference of classroom settings.

However, three students preferred both types of courses. Their reasons supported the preference of traditional courses. Their reasons were that teachers were important in class and attending the classes helped them learn and they loved surfing the Internet for the information. However, there were some students preferring hybrid courses and the reasons why they liked hybrid courses were the ease of downloading the materials, learning resources, self-paced learning and flexible learning. Overall, 71% of the focus group participants preferred traditional courses.

The classroom observations also confirmed the students' preference. In class students sat quietly, listened to the lectures and wrote down what the teacher taught.

Students rarely asked the questions. It seems that ideally teachers know the importance of immediate assistance but practically since no one asked question, they did not pose any challenging questions.

It can be stated that the students in this study preferred traditional courses because they believed in instructor expertise and knowledge to help them learn. Student learning characteristics also support the type of course they prefer.

Factors Impacting Student Success

Most respondents (66 %) reported that studying the traditional course helped them succeed in learning while some (29%) believed that learning with hybrid courses supported their success. However, few students (4%) did not report the factors that helped them succeed in studying. The respondents told me that attending the classes and listening to the teachers helped them succeed in learning and sometimes teachers gave them some techniques in learning. Moreover, they believed that it was very essential to have teachers in the class because they could ask the teachers some questions.

The data from the focus group revealed the respondents' belief in factors affecting their success in studying. Factors can be groups into two: factors relating to teachers and factors relating to learners.

Factors relating to teachers. Participants believed that teacher expertise, teaching style and the use of educational technology are factors that help them succeed in learning.

Factors relating to learners. My focus groups agreed that class attendance, studying before and after class, good relationships with instructors, preparation for the exam, study groups, dependence on friends, and time management are factors that make them successful in studying.

Only one participant of a focus group interview revealed success which was related to the self-directed learning characteristics. He believed that being successful in learning can not be assessed with any grades. He said that succeeding in learning meant application of knowledge to real life problems or working. Knowles (1970) confirmed that learners learn new knowledge, understandings, skills, values and attitudes effectively if they are presented in the context of application to real-life situations.

From my class observations, I learned that the roles of teachers were very important in class. Most of the teachers took the control of delivering lectures and providing information and the students sat quietly, noted down what the teacher said. Few rarely threw questions or interrupted the lectures. These support what students believe help them succeed in learning.

Therefore, student success mainly comes from the student factors which seem to be passive to the teachers, not from the self-directed learning behavior. The participants did not reveal characteristics to show that they depend on themselves in learning.

Instructional Style

Of 52 instructors, they reported that they had 74 hybrid courses and 91 traditional courses which were offered in different semesters. The teachers who reported that they had offered traditional courses mentioned about the activities they designed for the learners. They gave lectures, let the students present their work, did some quizzes, and submitted assignment in class. They used mid-term and final examination as ways to assess students.

The teachers who had hybrid courses said that they met the students regularly, once a week, twice a week, three times a week or once a month. They had the students

download documents, post or read news, do and submit assignments. They did not assigned any marks for the VCR activities because they might not trust in students. They also employed mid-term and final examination to evaluate the success of the students.

The respondents also reported their opinions about the important things in learning and teaching. They believed that instructor knowledge and expertise, interactions between instructors and learners, learner responsibility, teaching techniques, subject-matter contents and classroom environment are important in learning and teaching. However, they did not believe in intrinsic motivation, informal relationship between an instructor and learners and formal classroom environment.

From six classroom observations, I did not see many collaborative activities in either type of class and four teachers did the same thing, delivering the lectures. But I did find some interesting differences. Four instructors, who taught large classes (more than 60 students), regardless what types of courses they were teaching, used lectures. But one instructor with 77 students tried to use different teaching methodology, using a video and class discussion. And another instructor with 30 students used an explanatory case study, a lecture, demonstration and practice. It was possible that the class size might influence the instructional strategies.

It is quite obvious that the instructors in this study support the notion of instructor-centered philosophy. Learning and teaching depend on the instructor (Zinn, 1990). Moreover, Scheurman (1998) confirmed that teachers act as transmitters. Their roles are to break the information and skills into small amount and present them to students. And the roles of the students are listening, rehearsing and reciting what the instructors give them.

Andragogy and Pedagogy

I found that the data from the student surveys and focus group interviews tended to support the notion of pedagogy.

Even though the percentage of student having success in hybrid courses is higher than that of traditional courses, the assessments of both courses are quite the same. The activities designed for hybrid courses were different from those traditional courses but in class the instructors who taught hybrid courses paid little attention to the activities in VCR. The instructors who taught hybrid courses used VCR as one of methods to enhance student learning but the main focus of the course was in the class, delivering lectures by the teacher. The instructors did not assess any activities designed for learning or any performances in hybrid courses. The instructors who taught both types of courses reported that they used mid-term and final examination to grade the students. Cross (1981) mentioned that the evaluation for pedagogical education is conducted by the teachers.

From the student survey, most students (60% of respondents) reported that they preferred traditional courses. Many respondents believed that if they were in class, they could ask the teachers some questions immediately. Some thought that they would understand more if they attended the class. Also, some students indicated that they could do some activities or assignments with friends and teachers and that they were more active to learn. They said that they needed instructors to help them learn, that the external factors motivated them to learn and that they liked attending the lectures. Some said that the teacher gave them some techniques to memorize the course contents.

Also the data from the focus group revealed 12 participants (57% of participants) of focus groups interview said that they liked traditional courses. The reasons that the students gave me were lack of self-control, instructor's knowledge and expertise, spending time with friends and structured classroom settings. Knowles and Associates (1984) confirmed that learners in pedagogical education have a dependent personality. They depend on the teachers for learning. In addition, Knowles (1994) posited that learners in the pedagogical model learn when the teacher tells them to do. The focus group participants told me that when the instructor was in class, they had more concentration to study. Patterson, Crooks and Lunyk-Child (2002) asserted that learners in pedagogical model are dependent on external sources such as an instructor to assess and provide their needs.

However, some respondents (40%) preferred hybrid courses with the reasons of more flexibility in learning, more responsibility and enjoyment of surfing the internet. And six participants of focus groups said that they liked studying hybrid courses because it makes learning much easier. They thought that VRC was a learning resource which they could read or upload the material whenever they wanted.

There were some interesting aspects about their hybrid course preference. Some respondents said that they were more eager to learn new things themselves and that it was easy to search for new information any time they wanted. Moreover, the participants of focus group who preferred hybrid courses also talked about self-paced learning. They believed that with self-paced learning they could understand the lessons more and they thought that learning was their own responsibility. These characteristics were classified as being self-directed as Knowles (1970) mentioned that two characteristics of self-

directed learners are self-concept and readiness to learn. The learner's self-concept moves from being a dependent personality to be a more independent self-directed learner.

The maximum score of SDLRS of the third year was 253 and the minimum was 158. The mean was 201. Even though the score falls in below average which means the learners have teacher-directed characteristics, the score is nearly in the average which is 202-226 and it indicates the learners posses self-learning characteristics. Moreover, Guglielmino (2008) mentions that a learner who is in average level tends to be successful in more independent situation, but s/he is not fully comfortable with managing the entire process of identifying their learning needs and planning and implementing the learning. This explanation supports what the focus group participants reported. They needed instructors to help them.

And the participants of focus groups told me that they usually searched for the information for their future and prepare themselves accordingly. The third year students were about 20-21 years old. Knowles (1970) confirms that adults are motivated to learn to the extent that they perceive that learning will help them perform tasks or deal with problems which they face in their real life situation.

Although the instructors and the students tend to support pedagogy, there is also one focus group participant who is likely to fit in andragogical education. He told me that he both studied and did extracurricular activities. He told me that time management was an important factor that helped him succeed in learning. Yohsimoto, Inenage and Yamada (2007) added one more characteristic of adult learners which was time management. They stated that when a person grows up, his/her time of learning may be constrained by other social roles.

So, even though it seemed that learners and instructional style are likely to support the notion of pedagogy, there are some learning characteristics found in the third year students- indicating self-learning characteristics which support the notion of andragogy.

Summary

It can be summarized that students in this study preferred traditional courses. They believed that instructor's knowledge and expertise helped them learn. Students said that they need instructors because they lack self control so they want to have teachers to control them to learn.

Students thought that traditional courses helped them succeed in learning. The students also mentioned that preparation before class and before the exam were important factors helping them to be successful in learning. The factors the students mentioned are class attendance, taking notes, reviewing the lessons, good relationship with the instructor, teaching style and educational technology.

Closely looking into student grades, I found that the number of student successful in studying in hybrid courses was higher than that of student succeeding in learning traditional courses. It seemed that students studying hybrid courses had to work harder to get good grades. They had to download materials via VCR, submit their work, and search for the information before the class. So these may be the reasons why many students preferred traditional courses. Activities and assessments occurred in the class. They did not have to prepare in advance. It might be possible that the students who succeeded in hybrid courses are those who were very determined and possessed self learning characteristics.

Moreover, the teachers designed activities to serve students learning in class and the assessments focus on learning performance, using mid-term and final examinations. The teachers who had hybrid courses are likely to use VCR as a tool to help students get more information on the course contents but they do not assign any marks or credits for the activities in VCR. The teachers in this study tended to have both types of courses. Theoretically, instructors see the importance of self-directed learning and the use of hybrid courses but practically, they can not apply it to the classroom. Also, the number of students in the class is also important. It may affect the instructional style.

Also, many instructors believed that their knowledge and expertise, teaching methodology, interactions between learners and teachers, and learners' responsibility were important in learning and teaching. They did not believe that external motivators were important in learning and teaching.

It is likely to say that the learners in this study are in the pedagogical model. They tend to depend on the teachers and are ready to learn when the teachers tell them to and they have a subject-centered orientation to learning (Knowles & Associates, 1984). Overall, there is little difference between lecture and hybrid teaching and that students need teacher-centered instruction, regardless of years, faculty they belong to or type of courses they like.

CHAPTER VI

SUMMARY, FINDINGS, CONCLUSIONS, FUTURE RESEARCH, AND FINAL STATEMENT

Online learning is increasing worldwide. Thailand has changed its educational policy from teacher centered to student centered, according to the National Act in 1999. To achieve this goal, universities also have to change their instruction to be in accordance with the educational policy. Prince of Songkla University (PSU) has improved its policy to support the National Act and to promote life-long learning through the creation of increased number of hybrid courses (online and traditional class) in order to foster student self-learning behaviors through andragogy which lead learners to their learning goal.

Knowles, Holton III and Swanson (1998) notions of andragogy focus his belief that adult learners should be treated and taught differently from children. He assumed when adult learners start learning, they need to know why they need to learn, they have self-concept of being responsible for their own decision, they have some experience, they are ready to learn and they are motivated to learn by internal factors. Yoshimoto, Inenaga and Yamada (2007) added another characteristic of adult learners, which is time management. They need to have good time management because of multiple social roles.

In this study, andragogical theory was used to explain student success in studying hybrid or traditional courses in PSU.

In this chapter I present the summary of my study, the conclusions that I have drawn from this research, suggestions for future research and provide a final statement.

Summary of the Study

I have been teaching in PSU for more than 17 years and have taught both hybrid and traditional courses. This experience provides me with a good foundation for understanding students and instructors. It also allows me to connect easily with my research participants and enables me to have a great insight to conduct an in-depth data analysis. I believe that the findings from this study can serve as a foundation for future research nationwide in each type of course and student success to advance our understanding of what learning characteristics are appropriate for students studying hybrid courses in universities, enabling the university administrators to create policy that support student learning characteristics and promote instructional style and help student reach their goal in studying and in their life.

Purpose of the Study

The purpose of this study was to explore the relationship between student success in coursework, student preferences for self-directed (on-line) or (teacher-centered) traditional classroom settings and instructional strategies of pedagogy and andragogy evidenced in PSU course offering. The following research questions guide this study:

1. What are the course design preferences of students studying in the university?
2. What factors do students believe affect their success in studying those courses?
3. What is the academic success of the students enrolling in hybrid and traditional courses?
4. In what ways do andragogy and pedagogy relate to student success and student preferences?
5. What other realities are revealed about student success, student preferences of learning and instructional style?
6. How useful are the instructional concepts of andragogy and pedagogy for understanding student academic success?

Procedures

Data necessary for this study were student preferences and self-directed learning characteristics, the data from instructors about the courses they taught and how they taught and managed the classes. Data sources were student enrolling in hybrid and traditional courses, and instructors teaching both hybrid and traditional courses.

Data Collection. The data collection process for this study was an explanatory case study through instructor and student surveys, class observations and focus group interviews to gather necessary data to get a full, rich quantitative and qualitative analysis and report. Invitation letters were sent to 130 instructors. Six selected instructors (three teaching traditional courses and three teaching hybrid courses which use both lecture and internet) were observed and 231 surveys were distributed to students attending the classes that I had observed. Twenty one student participants were purposively selected to

participate in focus group interviews. This enabled me to have a representation of student success and instructional style from students and instructors of PSU, Hat Yai Campus.

Data Analysis. Knowles' (1980) andragogical and pedagogical theory was a main component of the data analysis process. He stated that adult learners have certain learning characteristics which help them learn and succeed in learning. I used Knowles' andragogy as a lens to look into the data for this study and to explore how the theory applied. The quantitative data was analyzed with SPSS (Version 11.5, Babbie, Halley & Zaino, 2003) to describe instructor and student surveys. Descriptive statistic, ANOVA, and t-test were used. Moreover, the qualitative data followed Creswell and Clark's (2007), suggesting that researchers prepare, read, code, describe, present and interpret the data in order to have a vivid picture.

Interpretation of the qualitative data was reflective. I looked for emerging and recurring themes, similarities, patterns and comparisons within and across the data. I used triangulation and personal bias to ensure the accuracy of my findings. Meaning was constructed through my own personal assessment.

Findings

I deem that the design of this study, along with Knowles' theory, enabled me to explore the relationship between student successes in course work, and student preference of self-directed or traditional classroom setting. Findings from this study are presented here in summary form as answers to the study's six primary research questions.

Research Question One: What are the Course Design Preferences of Students Studying in the University?

Although PSU offers both hybrid and traditional courses, more than half of the students who completed the surveys preferred traditional courses. They believed that the instructors could help them learn and succeed in learning. Some respondents said that they liked traditional courses because they needed immediate assistance, and the instructor knowledge and expertise were important for them. Focus group participants (60% of the total, 12 participants) also liked traditional courses because they liked structured learning setting, spending time with friends and teacher-centered learning. The reasons from the focus group participants were in line with the respondents.

Research Question Two: What Factors do Students Believe Affect their Success in Studying those Courses?

The data from focus group interviews revealed two main factors affecting their success: factors relating to the learners and factors relating to the instructors. The factors that help them be successful in learning are class attendance, studying before and after class, good relationships with the instructors, preparation for the exam, study groups, dependence on friends and time management. And the factors relating to instructors are teacher expertise, teaching style and the use of educational technology. Knowles, Holton III and Swanson (1998) confirmed that in pedagogical model a learner has a dependent personality. They depend on the instructors for their success. And learners have a subject-centered orientation to learning. They see learning as acquiring subject-matter content.

Research Question Three: What is the Academic Success of the Students Enrolling in Hybrid and Traditional Courses?

I found that the number of students successful in hybrid courses (65% of the students enrolling hybrid courses got B+ or higher grades) was higher than those who succeeded in traditional courses (29% of students studying traditional courses earned B+ or higher grades).

The number of students who were not successful in studying traditional courses (8% of the total) was higher that that of students who do no succeed in hybrid courses (3% of the total).

Interestingly, the number of students who withdrew from both types of courses was the same, three students in both. The reason that the students withdrew the courses was that they got low marks in mid-term examination which might later affect their final grade.

The data showed that the students who studied hybrid courses earned better grades. It was likely that they were very determined in their learning. It was possible that they had to download the materials before or after class so they had a chance to read and reread the materials. It seemed that the teachers who had hybrid courses helped the students plan and implement their own learning path which helped them succeed in learning and might lead to a better grade.

Research Question Four: in What Ways do Andragogy and Pedagogy Relate to Student Success and Student Preferences?

I found that instruction of the teachers in this study supported pedagogy. When the instructors were in class, most of them delivered lectures. Only one instructor used a

video and a discussion and one used different teaching methodology, giving a lecture, demonstration, and exercise. Moreover, from the instructor survey, 77% of the instructors believed that the most important thing in teaching and learning was teacher expertise and knowledge. Also, from the class observations I found that the instructors took control of speaking and the learners listened quietly and did not ask any questions. Also, Wooten and Hancock (2009) confirmed that the role of instructor in pedagogy is to direct the learning and fact-based lecturing is the mode of subject-matter transmission.

Learners also preferred the traditional courses that were taught by the instructors. The believed that teacher knowledge and expertise helped them succeed in learning. Moreover, they needed control from the teacher, if there is none; it is very difficult for them to learn and to succeed in learning.

Oladoke (2006) found that the learners were successful with their learning because of their ability to self-direct, intrinsically and extrinsically motivate themselves and control their own learning. Most students in this study did not illustrate self-directedness but only some of them mentioned some learning characteristics which were time management, self-paced learning and study group. Knowles, Holton III and Swanson (1998) mentioned that when adult learners begin learning, they know their goal of learning and can handle all problems. And as adults grow up, they move toward self-direction.

The students in this study believe that the control of the teachers, study before and after class, preparation for the exam, class attendance, study groups and dependence on friends, teacher's knowledge and expertise, friendliness of the teachers, teaching style and the use of educational technology would help them succeed in learning. Moreover, I

found that the items from student surveys revealed student learning characteristics. For example, one item in student surveys asking the students whether they feel happy when they finish learning, all the respondents rated high, meaning they highly agreed with the sentence. It seemed that they studied because they had to do so. This shows that they are dependent on the instructors to direct their learning. Wooten and Hancock (2009) proposed that learning is compulsory and tends to disappear shortly after instruction in pedagogy.

Moreover, the instructors who had hybrid and those having traditional courses reported that they used quizzes, mid-term and final examination as ways to assess the student success. The instructors who had hybrid courses use VCR as a tool to download materials for the students and a channel for communication.

So, these support the notion of pedagogy. Knowles, Holton III and Swanson (1998) asserted that:

> the pedagogical model assigns to the teacher full responsibility for making all decisions about what will be learned, how it will be learned and when it will be learned and if it has been learned, leaving the learners only the submissive role of following a teacher's instructions. (p.62)

Research Question Five: What Other Realities are Revealed about Student Success, Student Preferences of Learning and Instructional Style?

Student success. One reality that I have found from the student success is that there are many factors which students believed help them succeed in learning, class attendance, studying before and after class, good relationships with the instructors, preparation for the exam, study groups, dependence on friends and time management.

But most of these factors revealed one existing fact about learner characteristics, which is –that they are submissive to the instructors. Only one factor, time management, reflects self-directed learning characteristics. One of my focus group participants told me that he liked surfing the Internet and learning new information but he was willing to do it if he earned some marks in doing such activity. It seemed to me that the students know about the importance of self-directed learning but as long as there is no force or no control from the instructors, they prefer not to do and do other activities which help them succeed in learning. Wooten and Hancock (2009) support that in pedagogy learners often see no reason to take a particular course. They know that they have to learn the information.

Course preference. From different sources of data, most learners demonstrated their course design preferences, traditional courses. They need the teachers to help them learn. Even though they knew the importance of self-directed learning, they preferred the instructors in the classrooms. Students wanted the instructor to control their learning and make them study. External motivators were also important to them. The data support the notion of a preference for pedagogy. The learners need the instructors, their knowledge and expertise to help them learn.

Instructional style. Although there was a tendency that the teachers who had been teaching for more than 15 years were changing their types of courses, they had more hybrid courses and they also had traditional courses. It seemed that the teachers who had worked for a long time were likely to change to andragogical education and to promote self-learning. But when looking closely and deeply into the activities they designed for the students, I found that the instructors who reported that they had hybrid courses created activities for students, for example, downloading material, posting news and

announcement, searching for information, and submitting assignments. But the teachers did not assign any marks or give any credits for these activities. That means participating in these activities or not would not affect their success in learning. So, many of the students paid no attention to activities in VCR but they placed importance to classroom learning. So the assessment of the teachers who had hybrid courses is similar to the assessment of the teachers who had traditional courses, using mid-term and final examination. Percival (1993) suggested that one implication for practice andragoical theory is that the learners should be involved in a process of self-evaluation. So, the teachers should help learners to assess the progress they are making toward their educational goals.

I found that the two instructors, teaching 77 and 30 students respectively, used different instructional strategies, using a video, a class discussion, demonstration, doing exercise individually. It seemed that the number of students in the class influenced the instructional style. Moreover, in class observations, all instructors paid importance to lectures. They delivered the subject matters to students. Even though the instructors taught hybrid courses, they still used lectures as a primary means to teach the students.

However, from the classroom observations, I found that the learning climate is very supporting and there is no tension. Many students were waiting for the teacher. When the teacher asked some questions, there was a student who answered the question. The classroom environment is very relaxing. Percival (1993) confirmed that the learning climate is very important in adult education. “Both physical and the psychological environment of learning should be constructed to make adults feel physically comfortable and at ease and accepted, respected and supported” (p.64).

So, the realities emerging from this study was submissive learning, teacher-directed learning characteristics. Some students realized the importance of self-directedness but they did not practice it because the instructors did not pay attention to that learning characteristic. And there was a tendency that the instructional style supports and fosters this kind of learning characteristics. But the classroom environment is very supporting and caring for the students. Knowles (1996) contends that the environment should be one which causes adult learners to feel accepted, respected and supported. Also, the third-year students seem to have greater number of self-directed learning characteristics.

Research question Six: How Useful are the Instructional Concepts of Andragogy and Pedagogy for Understanding Student Academic Success?

I believe that the instructional concepts of andragogy are very useful. They provide a clear lens for me to look through my context of teaching and enable me to understand both learners and instructors more. It helps me as a researcher to question ourselves how we can improve our own context to be better to reach the goal of the university, to produce graduates who can adapt and get along with global and technological changes and who can have life-long learning goals and to serve the goal of 1999 National Education Act.

From the findings, even though it seems that both teachers and learners have a tendency to pedagogical education, there is a sign that teachers and learners know the importance of andragogical education. For example, the instructors encourage learners to download the materials and prepare before class. Neal, one of my focus group participants told me that “I had a class which a teacher came in and gave one question to

the students. He distributed a piece of paper for students to answer. He also provided some books if the students need more information. After the got the students' answer, he would tell them the answer. If the students disagreed with his idea, he would provide more resources for students to study. I like this course and I can understand and memorize what I have learned in the class." Or the third-year students prepare themselves for their future career.

So, I believe that hybrid courses are very useful for the university which is in the transition of changing from traditional to online instruction. However, the most important things are activities and assessments designed for hybrid courses. These can lead the students to achieve the desired learning characteristics. Instructional concepts of andragogy can be successfully implemented in PSU but we need some changes in learners and teachers. Yoshimoto, Inenaga and Yamada (2007) propose that in andragogy mode "the role of the teaching staff is learning support rather than teaching. In other words, the pedagogy mode is like on-campus learning and the andragogy mode is like off-campus open learning" (p.80).

Conclusions and Implications

Conclusions and implications from this study can be found in three different areas. The first is related to the usefulness of qualitative and quantitative methods in understanding the success of students and self-directedness in hybrid and traditional courses. The second relates to academic success and self-directedness and lastly, the third relates to andragogical theory.

Research Methods

PSU did not offer any online courses, but rather hybrid courses, using Internet and traditional way of teaching. Many studied of self-directed learning characteristics, very crucial in online learning, have been conducted around the world but not in Thailand. Then, I chose an explanatory case study with concurrent procedures. Creswell (2003) suggests that the researcher combines qualitative and quantitative data to get an in-depth analysis of the research problem.

I learned that the explanatory case study provided me with the picture of student success and instructional style and the qualitative data give me an in-depth picture to confirm the existing information. I believe that this method helps me to understand my context very well, with the use of surveys, class observations, and focus group interviews. I think that that I was able to further explain the phenomenon which I was studying and gained valuable data than any other methods may have permitted.

The class observations were purposively selected but when I reported, I did not use any names and no one could identify the name of the instructors or know which class I had observed. And, the focus group interviews were conducted privately and the pseudonyms were used so that no one could identify the participants. I felt that the participants trusted my words and the process of Oklahoma State University's Institutional Review Board (Appendix A). Consequently, I am quite certain that the design of my study was beneficial for investigating the relationship between student success in coursework, student preferences for self-directed (on-line) or (teacher-directed) traditional classroom setting and instructional strategies of pedagogy and andragogy evidenced in PSU course offering.

Self-Directedness and Academic Success

I learned that most students who have dependent learning characteristics are partly because of the instructional style. Since the instructors do not pay attention to promote students' self-learning, the students might consider that it might not be worth doing so or the instructor may not put it in the exam.

I believe that the students who succeed in learning are the ones who take learning serious, meaning they do all activities assigned by the teachers, attend the lectures and do well in the examination. It might be that

Moreover, I learned that the third year students seem to possess self-learning characteristics. It is possible that they are going to graduate and they know their goal of learning so they need to do something to reach their goal in life. Wooten and Hancock (2009) say that when learners are goal directed, they know what purpose they are learning new information.

I did find that that there is not much difference at this university between lecture and hybrid instruction and that the students prefer teacher-directed instruction, regardless of year in school, faculty (college) or type of course preferred.

I believe that the findings of this study will be very beneficial to the university. I think that if the university wants all the students to achieve the goal of lifelong learning and to maintain the notion of learner-centered, the university needs to do some changes in terms of student learning and instructional style. Knowles, Holton III and Swanson (1998) proposed that pedagogy is appropriate for children in the age of 1 to 18 years old. I believe that the students who embark to study in the university are old enough so that andragogical education is very suitable for them. What they need is continuing training

since the students are in the first year and until they graduate to promote self-directed learning. Moreover, the instructors need to be trained about how to teach differently, how to promote students thinking and learning by themselves, and how to be facilitators not transmitters. So, with training of both students and instructors, I believe that self-directedness and academic success of students in PSU will reflect andragogy and will result in promoting lifelong learning in learners.

Theory

Andragogy was first proposed by Knowles in 1975 and then it was readjusted in 1998 Knowles mentioned that pedagogy is not opposite to andragogy but it is "a continuum from pedagogy to andragogy" (Cross, 1981, p.225). Knowles, Holton III and Swanson (1998) maintain that andragogical model is based on five assumptions which are the need to know, the learners' self-concept, the role of the learners' experiences, readiness to learn and orientation to learning. So it is assumed that adult learners posses these learning characteristics and can achieve their goal in learning and maintain lifelong learning. With this theory, when I applied it with my study, I found that the instructors and the students have a tendency to pedagogy, which Knowles called child education. So, it seemed that andragogical model is not fully practiced in PSU.

However, some participants showed that they possessed the characteristics which can be classified as adult learners, which are time management and self-paced learning characteristics. But the number of them is very small.

Moreover, Yoshimoto, Inenaga and Yamada (2007) confirmed that "andragogy is learner-focused, compared with pedagogy, which is teacher-focused" (p. 80).

Andragogical theory is appropriate for explaining what is going on in the university which aims to promote the notion of learner-centered. Although from this study, through andragogical lens I found that the students and the instructors tend to support the notion of pedagogy, there is still hope for a change to promote the notion of andragogy. And, I believe that andragogy helps us to understand certain aspects of adult learning.

Future Research

This study can be a catalyst for future research to conduct similar studies with different groups of students and different instructors. Similar studies should be conducted to determine self-directedness, academic success and instructional style in PSU in order to find out whether the future research confirm the findings of my study or present some interesting aspects supporting the andragogical theory.

I conducted a research with two groups of students, the first group studying traditional courses and the second group studying hybrid courses. The next study should be conducted about the students who prefer hybrid courses. This might provide some answers to the student course preferences and the instruction style which help them succeed in learning.

Moreover, the further research should be done to explore why students in different years (the first and the third versus the second, the fourth and the fifth) might prefer different styles of learning and teaching.

I found that the instructors who have been working with the university for 10 years or more have a tendency to have more hybrid courses. It is very interesting to explore why the older teachers are using more hybrid instruction.

Lastly, additional research is crucial to determine what self-directedness, academic success and instructional style of students in the university. Can andragogy be used to explain the phenomenon in Thai universities? Knowles, Holton III and Swanson (1998) propose that "learning is a complex phenomenon that defies description by any one model. The challenges has been, and continues to be, to define what is most characteristic of adult learners, to establish core principles, and to define how to adapt those core principles to varying circumstances" (p.152).

Final Statement

The purpose of this study was to explore student success, student course preferences for self-directed or traditional classroom setting and instructional strategies of pedagogy and andragogy evidenced in PSU course offering. I believe that the findings of my study show aspects of adult learner characteristic, student success and instructional strategies which do not support andragogy but pedagogy. I also believe that the findings of my study will enable university administrators to understand the existing facts about learners and instructors reconsider its present learning and teaching policy and create some policies to enhance self-directed learning and promote learner-focused instruction in PSU to help all students to reach their goal of learning. .

REFERENCES

Asch, M. J. (1951). *Nondirective teaching in psychology: An experimental study*. *Psychological Monographs*: *General and Applied*, 65(4); whole no. 321. Washington: American Psychological Association.

Ashmus, M., and Haigh, G. (1952). *Some factors which may be associated with student choice between directive and non-directive class*. Unpublished master's thesis, Springfield College, Springfield, United States.

Axelrod, J. (1955). Group dynamics, nondirective therapy, and college teaching. *Journal of Higher Education, 26*, 200-207.

Babbie, E. R., Halley, F. S. & Zaino, J.S. (2003). *Adventures in social research: Data analysis using SPSS 11.0/ 11.5 for windows.* (5th ed.). California: Pine Forge Press.

Bender, T. (2003). *Discussion-based online teaching to enhance student learning: Theory, practice and assessment*. Virginia: Stylus Publishing.

Birzer, M.L. (2004). Andragogy: Student centered classrooms in criminal justice programs. *Journal of Criminal Justice Education*, *15*, 349-411.

Bovard, E. W. Jr. (1951). Group structure and perception. *Journal of Abnormal and Social Psychology*. *46*, 398-405.

Brockett, R. G., & Hiemstra, R. (1991). *Self-direction in adult learning: Perspectives on theory, research, and practice*. New York: Routledge.

Brown, K. M. (2006). Leadership for social justice and equity: Evaluating a transformative framework and andragogy. *Educational administration quarterly*. *42*, 700-745.

Candy, P. C. (1990). The transition from learner-control to autodidaxy: More than meets the eye. In H. B. Long & Associates (Eds.), *Advances in research and practice in self-directed learning*. Oklahoma: Oklahoma Research Center for Continuing Professional and Education of the University of Oklahoma.

Candy, P. C. (1991). *Self-direction for lifelong learning: A comprehensive guide to theory and practice*. San Franscisco: Jossey-Bass Publishers.

Conceição, S.C.O. (2007). *Understanding the environment for online teaching*. In S.C.O. Conceição. (Ed.)., Teaching strategies in the online environment. San Francisco: Jossey-Bass.

Conti, G. J (1990). Identifying your teaching style. In M. W. Galbraith. (Ed.)., *Adult learning methods: A guide for effective instruction.* Florida: Robert E. Krieger Publishing Company.

Conner, M. L. (2004). Andragogy and pedagogy. *Ageless Learner*. Retrieved April 1, 2008, from http://agelesslearner.com/intros/andragogy.html

Creswell, J. W. (2003). *Research design.* (2nd ed.). Thousand Oaks: Sage Publications, Inc.

Creswell, J. W., & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. Thousand Oaks: Sage Publications, Inc.

Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning*. San Francisco: Jossey-Bass Publishers.

Dabbagh, N. (2002). Using a web-based course management tool to support face-to-face instruction. *The Technology Source*, March/April, 1-6. Retrieved January 14, 2008, from http://ts.mivu.org.

Elijas, J. L., & Merriam, S. (1980). *Philosophical foundations of adult education*. New York: Robert E. Krieger Publishing Company.

Elvers, G. C., Polzella, D. J., & Graetz, K. (2003). Procrastination in online courses: Performance and attitudinal differences. *Teaching of Psychology*, *30*, 159-162.

Faw, V. A. (1949). A psychotherapeutic method of teaching psychology. *American Psychologist*, 4, 104-109.

Fitzgerald, C. T. (2003). *Self-directed and collaborative online learning: Learning style and performance.* Digital Dissertation. (UMI No. 3090404)

Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, *48*, 18-33.

Gearhart, D. L. (2002). *The effect of self-directed learning skills on the successful completion of an online course*. Digital Dissertation. (UMI No. 3075773)

Gillham, B. (2000). *Developing a questionnaire*. New York: Lexington Avenue Contiuum.

Gray, D. E. (1999). The internet in lifelong learning: Liberation or alienation?. *International of Lifelong Education*. *18*, 119-126.

Grow, G.O. (1991). Teaching learners to be self-directed. *Adult Education Quarterly*. *41*, 125-149.

Guglielmino, L. M. (1977). *Development of the self-directed learning readiness scale*. Digital Dissertation. (UMI No. 786004)

Guglielmino, L. M. (2008). The self-directed learning readiness scale. (SDLRS). Retrieved January 26, 2008, from http://www.gulielmino734.com/prod01.htm

Guglielmino, L. M. (2008). Score interpretation. Retrieved March, 30, 2009, from, http://www.lpasdlrs.com

Hara, N., & Kling, R. (1999). Students frustrations with a web-based distance education course. *First Monday*, *4(12)*. Retrieved April 16, 2008, from http://www.firstmonday.org/issues/issue4_12/idex.html

Hartley, K., and Bendixen, L. D. (2001). Educational research in the Internet age: Examining the role of individual characteristics. *Educational Researcher*, *30*, 22-26.

Hiemstra, R. (2003). More than three decades of self-directed learning: From whence have we come?. *Adult learning*. *14(4)*, 5-8.

Hornor, N. Z. (2001). *The effectiveness of an application of some concepts from andragogical instruction as compared with traditional instruction in an introductory college algebra course.* Digital Dissertation. (UMI No. 301376)

Houle, C. O. (1961). *The inquiring mind*. Wisconsin: The University of Wisconsin Press.

Hsu, Y., & Shiue, Y. (2005). The effect of self-directed learning readiness on achievement comparing face-to-face and two-way distance learning instruction. *International Journal of Instructional Media*, *32*, 143-156.

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

Kerr, M.S., Ryneason, K. & Kerr, M.C. (2006). Student characteristics for online learning success. *Internet and Higher Education*, 9, 91-105.

Kiernan, V. (2003). A survey documents growth in distance education in late 1990s. *Chronicle of Higher Education*, *49*(48), 1-3.

Knowles, M.S. (1970). *The modern practice of adult education: Andragogy versus pedagogy.* Chicago: Follett Publishing Company.

Knowles, M., & Associates. (1984). *Andragogy in action*. San Francisco: Jossey-Bass Inc.

Knowles, M. (1975). *Self-directed learning: A guide for learners and teachers*. New York: Association Press.

Knowles, M. (1977). *The modern practice of adult education: An andragogy versus pedagogy*. New York: Association Press.

Knowles, M. (1980). *From andragogy to pedagogy*. New York: Association Press.

Knowles, M. (1996). Andragogy: An emerging technology for adult learning. In R. Edwards, A. Hanson & P. Raggatt (Eds.), *Boundaries of adult learning* (pp. 82-98). New York: Routledge.

Knowles, M.S., Holton, E. F., & Swanson, R.A. (1998). *The adult learner: The definitive classic in adult education and human resource development.*(5th ed.). Houston: Gulf Publishing Company.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2005). *The adult learner: The definitive classic in adult education and human resource development.*(6th ed.). California: Butterworth-Heinemann.

Krentler, K. A. & Willis-Flurry, L. A. (2005). Does technology enhance actual student

learning? The case of online discussion boards. *Journal of Education for Business*, July/August, 316-321.

Leasure, A. R., Davis, L., & Thievon, L. S. (2000). Comparison of student outcomes and preferences in a traditional vs. world web base baccalaureate nursing research course. *Journal of Nursing Education*. *39*, 149-154.

Lee, S. (2003). *Computer assisted classroom discussion in three ESL classroom: A case study of the experiences of a teacher and her students.* Unpublished doctoral dissertation, University of Texas at Austin, (UMI No. 3118040)

Lowerison, G., Sclater, J., Schmid, R. F., & Abrami, P. C. (2004). Student perceived effectiveness of computer technology use in post-secondary classroom. *Computers & Education*, 47, 465-489.

Lynch, M. M. (2001). Effective student preparation for online learning. *The Technology Source*. Retrieved February 8, 2008, from http://ts.mivu.org

McKeachie, W. J. (1951). Anxiety in the college classroom. *Journal of Educational Research*, *45*, 153-160.

McKeachie, W. J. (1978). *Teaching tips*. (7th ed). Toronto: D.C. Heath and Company.

McKeacie, W. J., & Svinicki, M. (2006). *Teaching tips: Strategies, research, and theory for college and university teachers*. New York: Houghton Mifflin Company.

Merriam, S. B., & Caffarella, R. S. (1991). *Learning in adulthood: A comprehensive guide*. San Francisco: Jossey-Bass Publishers.

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide*. (3rd ed.). San Francisco: Jossey-Bass.

Mertens, D.M. (1998). *Research methods in education and psychology: Integrating*

diversity with quantitative & qualitative approaches. California: Sage Publications, Inc.

Moore, J. (2005). Is higher education ready for transformative learning? A question explored in the study of sustainability. *Journal of Transformative Education*, *3*, 76-91.

Moore, M. (1986). Self-directed learning and distance education. *Journal of Distance Education*, *1*. Retrieved April 12, 2008 from http://cade.athabascau.ca/vol1.1/moore.html.

Morris, L.V., Finnegan, C., & Wu, S. (2005). Tracking student behavior, persistence, and achievement in online courses. *Internet and Higher Education*, *8*, 221-231.

Mullen, G. E., & Tallent-Runnels, M. K. (2006). Student outcomes and perceptions of instructors' demands and support in online and traditional classrooms. *Internet and Higher Education*, 9, 257-266.

Murphy, E. (1997). Constructivism: From philosophy to practice. (ERIC Document Reproduction Service No. ED 444966).

Oddi, L. F. (1987). Perspectives on self-directed learning. *Adult Education Quarterly*, *38*, 21-31.

Oddi, L. F., Ellis, A. J. & Roberson, J. E. A. (1990). Construct validation of the ODDI continuing learning inventory. *Adult Education Quarterly*, *40*, 139-145.

Office of The Education Council. (2001). การปฏิรูปการเรียนรู้ที่เน้นผู้เรียนเป็นสำคัญในระดับอุดมศึกษา: กรณีศึกษาการเรียนการสอนสาขาวิชาสังคมศาสตร์ [Educational Reform focusing on student-center in higher education: Case Study in social sciences field]. Bangkok: Thailand.]

Oladoke, A. O. (2006). *Measurement of self-directed learning in online learners*. Digital Dissertation. (UMI No. 3206369)

Palloff, R.M. & Pratt, K. (2005). *Teaching online*: Lesson form the cyberspace. San Francisco: Jossey-Bass A Wiley Company.

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students*: *A third decade of research.* San Francisco: Jossey-Bass.

Patterson, C., Crooks, D., & Lunyk-Child,O. (2002). A new perspective on competencies for self- directed learning. *Journal of Nursing Education*, *41*, 25-31.

Patton, M. Q. (2002). *Qualitative research & evaluation methods*.(3rd ed.). London: Sage Publications.

Percival, A. (1993). *Practicing theory: A guide to becoming an effective adult education programmer.* Saskatoon, Saskatchewan: University Extension Press.

Petrides, L. A. (2002). Web-based technologies for distributed (or distance) learning: Creating learning centered educational experiences in the higher education classroom. *International Journal of Instructional Media*, *29*, 69-77.

Pilling-Cormick, J. (1997). Transformative and self-directed learning in practice. *New Directions for Adult and Continuing Education*, 74, 69-77.

Planning Division, Prince of Songkla University. Number of hybrid courses. Retrieved April 9, 2008, from www. planning.psu.ac.th.

Planning Division, Prince of Songkla University. Number of staffs in Prince of Songkla University in the fiscal year 2007. Retrieved April 9, 2008, from www. planning.psu.ac.th

Prince of Songkla University Vision and Mission. Retrieved December 10, 2007, from

www.international.psu.ac.th/intro/vision.htm.

Rachal, J.R. (2002). Andragogy's detectives: A critique of the present and a proposal for the future. *Adult Education Quarterly*, *52*, 210-227.

Registration Office, Prince of Songkla University. Number of students in Prince of Songkla University in 2008. Retrieved Octorber 2008, from http://reg.psu.ac.th

Richard, D. (2004). At last, we can replace lectures. *Chronicle of Higher Education*, *50*(44), B8.

Robinson, M. G. (2003). *The relationship between self-directed learning readiness and resilience among graduate students*. Digital Dissertation. (UMI No. 3119302).

Rovai, A. P. (2000). Building and sustaining community in asynchronous learning networks. *Internet and Higher Education*, 3, 285-297.

Ryan, K.C. (1999). *The relationship of two types of anxiety to self-directedness in a sample of adult education, graduate and undergraduate students*. Digital Dissertation. (UMI No. 9940728)

Shapiro, A. (2000). *Leadership for constructivist schools*. Lanham, Md: Scarecrow Press.

Shapley, P. (2000). On-line education to develop complex reasoning skills in organic chemistry. *Journal of Asynchronous Learning Networks*, *4*(2). Retrieved April 15, 2008, from http://www.sloan-c.org/publications/jaln/v4n2/index.asp

Scheurman, G. (1998). From behaviorist to constructivist teaching. *Social Education, 62(2),* 6-9.

Shovien, J., Huston, C., Fox, S., & Damazo, B. (2005). Challenging traditional teaching and learning paradigms: Online learning and emancipatory teaching. *Nursing*

Education Perspectives, *26*, 340-343.

Skager, R. (1979). Self-directed learning and schooling: Identifying pertinent theories and illustrative research. *International Review of Education*. *25*, 517-543.

Song, L. & Hill, J. R. (2007). A conceptual model for understanding self-directed learning in online environments. *Journal of Interactive Online Learning*. *6*, 27- 42.

Stockdale, S. L. (2003). *Development of an instrument to measure self-directedness*. Digital Dissertation. (UMI No. 3092836).

Suanpang, P., & Petocz, P. (2006). E-learning in Thailand: An analysis and case study. *International Journal on E-learning*, *5*, 415-438.

Tough, A. M. (1977). *Learning without a teacher: A study of tasks and assistance during adult teaching project.* Toronto: The Ontario Institute for Studies in Education.

Vonderwell, S. (2003). An examination of asynchronous communication experiences and perspectives of students in online course: A case study. *Internet and Higher Education*, 6, 77-90.

Vonderwell, S. & Turner, S. (2005). Active learning and preservice teacher's experiences in an online course: A case study. *Journal of Technology and Teacher Education*, *13*, 65-84.

Wagnild, G. M. & Young, H. M. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement*, *1*, 165-178.

Ware, S. M. (2003). *An investigation of the relationships of self-directed learning and learning styles among developmental reading students*. Digital Dissertation. (UMI

No. 3081608).

Weinert, F.E., & Helmke, A. (1995). Learning from wise mother nature or big brother instructor: The wrong choice as seen from an educational perspective. *Educational Psychologist*. *30*, 135-142.

Wooten, B. & Hancock, T. (2009). Online learning offers flexibility and convenience for teacher education. *Momentum*. *40*, 28-31.

Yin, R. K (2003). *Case study research: Design and methods.* Thousand Oaks, CA: Sage Publications.

Yoshimoto, K., Inenaga, Y. & Yamada, K. (2007). Pedagogy and andragogy in higher education: A comparison between Germany, the UK. and Japan. *European Journal of Education*, *42*, 75- 98.

Zinn, L. M. (1990). Identifying your philosophical orientation. In M. W. Galbraith.(Ed)., *Adult learning methods: A guide for effective instruction.* Florida: Robert E. Krieger Publishing Company.

.

APPENDICES

Appendix A

Oklahoma State University Institutional Review Board

Oklahoma State University Institutional Review Board

Date:	Tuesday, June 10, 2008
IRB Application No	ED0889
Proposal Title:	Self-Directedness and Academic Success of Students Enrolling in Hybrid and Traditional Courses
Reviewed and Processed as:	Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 6/9/2009

Principal Investigator(s):

Panida Sukseemuang
91 S. Univ. Place #7
Stillwater, OK 74078

Adrienne Hyle
325D Willard
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

☒ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,

Shelia Kennison, Chair
Institutional Review Board

Appendix B

Informed Consent Form

Okla. State Univ.
IRB
Approved 4/10/08
Expires 4/9/09
IRB # ED0889

STUDENT CONSENT TO PARTICIPATE IN A RESEARCH STUDY
OKLAHOMA STATE UNIVERSITY

PROJECT TITLE: Self-directedness and academic success of students enrolling in hybrid and traditional courses

INVESTIGATORS: Panida Sukseemuang, Professor in the Faculty of Liberal Arts, Prince of Songkla University and doctoral student at Oklahoma State University.

PURPOSE: This study is being conducted through Prince of Songkla University, Hat Yai, Songkhla, Thailand. The purpose is to explore the relationship between student success in coursework, student preferences for self-directed (on-line) or (teacher-directed) traditional classroom settings and instructional strategies of pedagogy and andragogy evidenced in PSU course offerings.

PROCEDURES: The project will involve the completion of one questionnaire about the types of course you have taken and one focus group interview. For focus group interview, the researcher will employ guided questions which ask about your opinion towards types of courses offered in PSU, factors which help you learn and which obstruct your learning and solutions of learning problems. The interviews will be audio-taped. Completion of this questionnaire is voluntary. Your participation is greatly appreciated. If you choose to participate, please return the completed questionnaire to Professor Panida in the Faculty of Liberal Arts.

RISKS OF PARTICIPATION: There are no risks associated with this project, including stress, psychological, social, physical, or legal risk which are greater, considering probability and magnitude, than those ordinarily encountered in daily life. If, however, you begin to experience discomfort or stress in this project, you may end your participation at any time.

BENEFITS OF PARTICIPATION: You may gain understanding of how research is conducted and an appreciation of working in groups with different students.

CONFIDENTIALITY: The records of this study will be kept private. Any written results will discuss group findings and will not include information that will identify you. All information about you will be kept confidential and will not be released. Research records will be stored securely and only researchers and individuals responsible for research oversight will have access to the records. This information will be saved as long as it is scientifically useful; typically, such information is kept for two years after publication of the results. Results from this study may be presented at professional meetings or in publications. You will not be identified individually; we will be looking at the group as a whole. It is possible that the consent process and data collection will be observed by research oversight staff responsible for safeguarding the rights and wellbeing of people who participate in research.

CONTACTS: You may contact any of the researchers at the following addresses and phone numbers, should you desire to discuss your participation in the study and/or request information about the results of the study: Panida Sukseemuang at phanida.s@psu.ac.th or at (074) 286769 or Dr. Adrienne Hyle, Ph.D., 325 Willard Hall, Dept. of Educational Studies Oklahoma State University, Stillwater, OK 74078, (405) 744-9893. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or irb@okstate.edu

PARTICIPANT RIGHTS: Your participation in this research is voluntary. There is no penalty for refusal to participate, and that you are free to withdraw your consent and participation in this project at any time, without penalty

CONSENT DOCUMENTATION: I have been fully informed about the procedures listed here. I am aware of what I will be asked to do and the benefits of my participation. I also understand the following statements:

I affirm that I am 18 years of age or older.

I have read and fully understand this consent form. I sign it freely and voluntarily. A copy of this form will be given tome. I hereby give permission for my participation in the study.

Signature of Participant _____ Date _____

I certify that I have personally explained this document before requesting that the participant sign it.

Signature of Researcher _____ Date _____

Okla. State Univ.
IRB
Approved 6/10/08
Expires 6/9/09
IRB # ED0869

Okla. State Univ.
IRB
Approved 6/12/08
Expires 6/19/09
IRB # ED0889

FACULTY CONSENT TO PARTICIPATE IN A RESEARCH STUDY
OKLAHOMA STATE UNIVERSITY

PROJECT TITLE: Self-directedness and academic success of students enrolling in hybrid and traditional courses

INVESTIGATORS: Panida Sukseemuang, Professor in the Faculty of Liberal Arts, Prince of Songkla University and doctoral student at Oklahoma State University.

PURPOSE: This study is being conducted through Prince of Songkla University, Hat Yai, Songkhla, Thailand. The purpose is to explore the relationship between student success in coursework, student preferences for self-directed (on-line) or (teacher-directed) traditional classroom settings and instructional strategies of pedagogy and andragogy evidenced in PSU course offerings.

PROCEDURES: The project will involve completion of a questionnaire about the types of courses you teach and one class observation. For the class observation, the researcher will use an observation sheet. This sheet is a checklist for the activities and interactions that take place in the classroom. While observing, the audio-tape will be used to check some missing information. Completion of this questionnaire is voluntary. Your participation is greatly appreciated. If you choose to participate, please return the completed questionnaire to Professor Panida in the Faculty of Liberal Arts.

RISKS OF PARTICIPATION: There are no risks associated with this project, including stress, psychological, social, physical, or legal risk which are greater, considering probability and magnitude, than those ordinarily encountered in daily life. If, however, you begin to experience discomfort or stress in this project, you may end your participation at any time.

BENEFITS OF PARTICIPATION: You may gain understanding of how research is conducted and an appreciation of working in groups with different students.

CONFIDENTIALITY: Any written results will discuss group findings and will not include information that will identify you. All information about you will be kept confidential and will not be released. Record forms will have identification numbers, rather than names, on them. Research records will be stored securely and only researchers and individuals responsible for research oversight will have access to the records. This information will be saved as long as it is scientifically useful; typically, such information is kept for two years after publication of the results. Results from this study may be presented at professional meetings or in publications. You will not be identified individually; we will be looking at the group as a whole. It is possible that the consent process and data collection will be observed by research oversight staff responsible for safeguarding the rights and wellbeing of people who participate in research.

CONTACTS: You may contact any of the researchers at the following addresses and phone numbers, should you desire to discuss your participation in the study and/or request information about the results of the study: Panida Sukseemuang at phanida.s@psu.ac.th or at (074) 286769 or Dr. Adrienne Hyle, Ph.D., 325 Willard Hall, Dept. of Educational Studies Oklahoma State University, Stillwater, OK 74078, (405) 744-9893. If you have questions about

Okla. State Univ.
IRB
Approved 6/10/08
Expires 6/9/09
IRB # AG0889

your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or irb@okstate.edu

PARTICIPANT RIGHTS: Your participation in this research is voluntary. There is no penalty for refusal to participate, and that you are free to withdraw your consent and participation in this project at any time, without penalty

CONSENT DOCUMENTATION: I have been fully informed about the procedures listed here. I am aware of what I will be asked to do and the benefits of my participation. I also understand the following statements:

I affirm that I am 18 years of age or older.

I have read and fully understand this consent form. I sign it freely and voluntarily. A copy of this form will be given tome. I hereby give permission for my participation in the study.

_____ _____

Signature of Participant Date

I certify that I have personally explained this document before requesting that the participant sign it.

_____ _____

Signature of Researcher Date

Appendix C

Letter of Permission from the Questionnaire's Owner

> phanida.s@psu.ac.th wrote: Date: Sun, 30 Mar 2008 10:55:44 +0700
> (ICT)
> Subject: Asking for a permission
> From: phanida.s@psu.ac.th
> To: guglielmino@rocketmail.com
>
> College of Education
> Oklahoma State University
> 336 Willard Hall
> Stillwater, Oklahoma, 74078, USA
>
> March 29, 2008
> Dear Dr. Guglielmino,
>
> My name is Panida Sukseemuang. I'm an Ed. D student at Oklahoma State
> University, College of Education. I'm going to do my dissertation on
> the
> relationship of self-directedness in hybrid and traditional courses.
> My
> subjects will be Thai students in Prince of Songkla University in
> Thailand. I'm going to have the questionnaire, Self-Directed Learning
> Readiness Scale (SDLRS), translated in Thai, and add some demographic
> questions.
> I'd like to ask for your permission to use your questionnaire, SDLRS.
> Do you have any suggestions? Please let me know.
> I'm looking forward to hearing from you.
> Yours Sincerely

Thank you for your interest in the SDLRS. Since we do not yet have an authorized Thai version, I would be happy for you to manage the translation process; however, there are guidelines you would need to follow. I have attached these for your review.

If you agree to follow the guidelines, complete the process, and submit the translation report, you will receive permission to reproduce 300 copies for use in your research at no cost. I will, of course, retain all rights to the new version of the SDLRS and will continue to be the only person who can authorize use of any version of the SDLRS in any language. You will need to include the copyright notice on all copies reproduced.

I look forward to working with you!
lmg

Lucy M. Guglielmino, Ed. D.
Phone: (772) 429-2425
FAX: (772) 429-2423
lguglielmino@rocketmail.com
website: http://www.guglielmino734.com

LETTER OF AUTHORIZATION

Thank you for your excellent work in translating the Self-Directed Learning
Readiness Scale/Learning Preference Assessment.

As I have now received your translation report and the electronic file of the instrument, I am authorizing your use of up to 300 copies. Your only cost will befor the scoring analysis. Our statistical consultant charges $75.00 US for the basic run.

Again, be sure to include a copyright notice on all copies reproduced. Any furtheruse beyond the 300 copies must be authorized by Guglielmino and Associates.

Lucy M. Guglielmino, Ed. D.
Phone/FAX: (772) 429-2425
website: http://www.guglielmino734.com

Want to attend the International Self-Directed Learning Symposium? See sdlglobal.com for details on the symposium and to view the International Journal of
Self-Directed Learning

--- On Sun, 6/29/08, phanida.s@psu.ac.th <phanida.s@psu.ac.th> wrote:

> From: phanida.s@psu.ac.th <phanida.s@psu.ac.th>
> Subject: Re: Report of SDLRS Thai Translation
> To: "Lucy Guglielmino" <lguglielmino@rocketmail.com>
> Date: Sunday, June 29, 2008, 11:16 PM
> >Dear Dr. Guglielmino,
>
> Sorry for a late reply because of the problem of my
> university webmail.
> It's fine with me. I will do everything as you request.
> With this mail,please the attached file, only the SDLRS and copyright information. If you want me to do some more adjustment, it's ok with me.

> Yours Sincerely,
> Panida Sukseemuang

> Thank you for the pdf version. I was able to open that.
> Please adapt it
> > a bit and send me a file with just the questionnaire
> title, instructions,items, and the copyright information.
> > Please be sure the copyright information is not on a
> separate page.

> > Thank you.
> > Lucy M. Guglielmino, Ed. D.
> > Phone/FAX: (772) 429-2425
> > website: http://www.guglielmino734.com

Appendix D

Table A

Frequency Count for Each Item in Student Survey

	Frequency Count					
Item	1	2	3	4	5	% achieving High Rating
Q1*	26	85	81	**35**	**4**	**17**
Q2*	34	93	78	**26**	**0**	**11**
*Q3**	*6*	*20*	76	99	30	*11*
Q4*	33	92	88	**14**	**4**	**8**
Q5*	59	117	43	**11**	**1**	**5**
*Q6**	*6*	*35*	116	59	15	*18*
Q7	44	74	72	32	9	*51*
Q8*	77	100	42	**10**	**2**	**5**
*Q9**	3	2	72	96	3	*2*
Q10*	27	114	72	**15**	**3**	**8**
Q11*	5	26	117	**71**	**12**	**36**
*Q12**	6	29	134	53	9	*15*
Q13*	25	95	81	**27**	**3**	**13**
Q14*	57	91	51	**24**	**8**	**14**
Q15*	34	81	74	**30**	**12**	**18**
Q16*	35	113	67	**14**	**2**	**7**
Q17*	46	80	66	**25**	**14**	**13**

	Frequency Count					
Item	1	2	3	4	5	% achieving High Rating
Q18*	25	89	89	**26**	**2**	**12**
*Q19**	6	36	96	73	20	*18*
*Q20**	8	13	56	92	62	*9*
Q21*	30	96	86	**16**	**3**	**8**
Q22	32	89	81	22	7	*52*
*Q23**	8	14	42	80	87	*10*
Q24	52	86	64	**22**	**7**	**13**
Q25*	14	51	134	**29**	**3**	**14**
Q26	31	92	85	**21**	**2**	**10**
Q27*	12	62	116	**40**	**2**	**18**
Q28*	13	82	98	**30**	**2**	**14**
*Q29**	8	49	97	61	16	*25*
Q30*	41	104	72	**14**	**0**	**6**
Q31	72	87	58	14	0	*69*
*Q32**	7	35	77	87	25	*18*
Q33*	17	81	86	**41**	**6**	**20**
Q34	31	88	84	**26**	**2**	**12**
*Q35**	12	28	91	64	36	*17*
Q36*	13	35	87	**80**	**16**	**42**

	Frequency Count					
Item	1	2	3	4	5	% achieving High Rating
Q37	82	97	41	**9**	**2**	**1**
Q38*	8	43	110	**59**	**11**	**30**
Q39*	40	92	75	**24**	**0**	**10**
Q40*	42	104	69	**16**	**0**	**7**
Q41*	36	86	85	**21**	**3**	**10**
Q42*	7	31	101	**67**	**25**	**40**
Q43*	12	56	106	**44**	**13**	**25**
*Q44**	6	15	62	106	42	***9***
Q45*	42	91	86	**10**	**2**	**5**
Q46*	46	107	68	**7**	**3**	**4**
Q47*	51	115	56	**8**	**1**	**4**
*Q48**	10	54	98	54	15	*28*
Q49*	63	112	51	**5**	**0**	**2**
Q50*	60	107	60	**3**	**1**	**2**
Q51*	55	122	45	**9**	**0**	**4**
Q52*	87	106	29	**6**	**3**	**4**
*Q53**	5	22	50	82	72	*12*
Q54*	97	97	32	**5**	**0**	**2**

Frequency Count

Item	1	2	3	4	5	% achieving High Rating
Q55*	25	86	95	**24**	**1**	**11**
*Q56**	13	34	55	79	50	*20*
Q57*	11	61	124	**31**	**4**	**15**
Q58*	74	84	59	**12**	**6**	**8**
					Total	**15**

Bold indicates items that were expected to have high ratings in support of self-directed learning.
Italic indicates items that were expected to have low ratings in support of self-directed learning.
% indicates percentage of respondents meeting the expected researcher ratings.
* indicates items that have responses which have less than 50% of the students reporting self-directed learning.

Appendix E

Instructor Survey

This is a survey designed to gather data on types of courses that you have taught at Prince of Songkla University, Hat Yai Campus. After reading each item, please indicate or give the response that is true for you. Your information will be helpful for students and the university. Completion of this questionnaire is voluntary. Only group demographics and responses will be reported. Completion of this questionnaire is voluntary. Your participation is greatly appreciated. If you choose to participate, please return the completed questionnaire to Professor Panida in the Faculty of Liberal Arts.

The information will be kept very confidential.

1. Sex □ Male □ Female

2. How long have you been teaching in Prince of Songkla University?
□ less than 5 years □ 6 to 10 years
□ 11 years to 15 years □ more than 15 years

3. Typically, how many courses do you teach in each semester?
□ one □ two □ three □ four □ five

4. In which programs do you teach?
□ undergraduate □ master □ Ph.D □ only graduate

5. If you teach undergraduate, what types of courses are you teaching?
□ hybrid courses (through VCR and meet students in class)
□ lecture courses (courses that require students to attend class or lecture)
□ Other please specify……

Hybrid courses
If you do not teach hybrid courses, you may skip Items 6- 8.

6. If you teach hybrid courses (courses via VCR), please tick (/) activities that you design for your students and write down your course number (s).

Activities:	Course no……	Course no…….	Course no……..	Course no……...	Course no……..
Download documents via the VCR (Virtual Classroom)					
Post or read announcements					
Submit assignment/do some assignments					
Study some materials or quiz on line					

Assign students to surf the internet for the information before/after class					
Talk with the students via the internet					

If you have designed other activities, please specify the activities and please give the course number……
…….

7. Please check (/) the frequency of class meetings (how often you meet your students in class).
   □ once a week □ twice a week □ three times a week
   □ once a month □ before and after the midterm
   □ before the final exam
   If others, please specify……

8. Please check (/) the student evaluation for your hybrid courses.
   □ midterm examination
   □ final examination
   □ some marks for activities in VCR
   □ some marks from online quizzes
   □ some marks from online interactions with friends or teachers
   □ projects with classmates
   If others, please specify……..

Traditional Courses

9. If you teach lectures courses, please tick (/) activities that you design for your students and write down the course number (s).

Activities in class	Course No…….	Course No……	Course No…….	Course No……	Course No……
Submit assignments/do some assignments/quiz					
Lectures/ have a presentation/ do pair work or group work					
Talk with the teacher before or after class					

If you have designed other activities, please specify the activities and write down the course number ……
……

10. Please check the student evaluation for your courses.
    - attendance
    - individual/ class participation
    - quizzes and assignments
    - projects with classmates
    - midterm examination
    - final examination

If others, please specify……

11. In your opinion, what is the most important in learning and teaching? Please check (/) the item (s) that relate to your view.
    - instructor's knowledge and expertise
    - learner's dependency on the instructor
    - learner-centered
    - subject-matter content
    - relaxing classroom environment
    - formal classroom environment
    - interaction between an instructor and learners
    - collaboration between an instructor and learners
    - informal relationship between an instructor and learners
    - learner's prior knowledge and experience
    - external motivation, for example, grade or instructor's approval.
    - intrinsic motivation, for example, a learner want to be good at something so he choose to study one course to help accomplish his need.
    - learner's responsibility in learning
    - teaching techniques
    - inquiry techniques

    If others, please specify……
    ……..

Thank you very much for your cooperation

- - - - - - - - - - - -

You may contact any of the following individuals should you desire to discuss your participation in the study and/or request information about the results of the study: Panida Sukseemuang at phanida.s@psu.ac.th or at (074) 286769 or Dr. Adrienne Hyle, Ph.D., 325 Willard Hall, Dept. of Educational Studies Oklahoma State University, Stillwater, OK 74078, (405) 744-9893. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or irb@okstate.edu

Appendix F

STUDENT SURVEY

This is a survey designed to gather data on types of courses that you have taught at Prince of Songkla University, Hat Yai Campus. After reading each item, please indicate or give the response that is true for you. Your information will be helpful for students and the university. Completion of this questionnaire is voluntary. Only group demographics and responses will be reported. . Completion of this questionnaire is voluntary. Your participation is greatly appreciated. If you choose to participate, please return the completed questionnaire to Professor Panida in the Faculty of Liberal Arts.

Part I: INSTRUCTIONS: This is a questionnaire designed to gather data on preferences of courses. After reading each item, please indicate or give the reason that is true of you. **The information will be kept secret and will not affect your grade.**

1. Which year are you studying?

□ 1st □ 2nd □ 3rd □ 4th

2. Sex: □ Male □ Female
3. How old are you?

□ 17-19 □ 20-22 □ 23-25 □ 25 > more

4. You are studying in the faculty of …….

□ Medicine □ Management and Sciences □ Science
□ Engineering □ Natural Resources □ Pharmaceutical Sciences
□ Nursing □ Liberal Arts □ Traditional Medicine
□ Law □ Economics □ Agro-Industry □ Dentistry

5. At PSU, including this semester, please tick (/) the courses have you taken that require you to do the following activities and write down the course number (s)

Activities:	Course no…….	Course no…….	Course no…….	Course no…….	Course no…….	Course no…….
Download documents via the VCR (Virtual Classroom)						
Post or read announcements						
Submit assignment/do some assignment on line						
study some materials and do an online quiz						
Surf the internet for the information before/after class						
Talk with the teacher via the internet						
Chat with your classmates						

If you do other activities, please specify and give the course number (s)…….....

6. At PSU, including this semester, please tick (/) the course(s) you have taken that require you to do the following activities and write down the course number(s):

Activities in class only:	Course no……	Course no……	Course no……	Course no……	Course no……	Course no……
Submit assignments/do some assignments/quiz						
Attend lectures/have a presentation						
Do a pair work/group work						
Talk with the teacher before or after class						

If you involve in other activities in class, please specify and write down the course number
(s)……
……

7. Overall, which classes do you prefer? Choose the one that you prefer and check (/) reason(s).

- □ classes using VCR/internet because……..
  - □ I have more flexibility
  - □ I have more interactions with friends and an instructor
  - □ I have more self-control
  - □ I am more active
  - □ I have more responsibility on my learning
  - □ I enjoy learning new things through the Internet
  - □ Other, please specify……

- □ traditional courses because……
  - □ I need an instructor to help me
  - □ Sometimes, I can't control myself
  - □ External motivators are very important for me
  - □ I like attending lectures
  - □ Other reasons, please specify……

8. In your opinion, which types of courses promote your learning best? Please check and give your reason (s).
   - □ hybrid courses because……
   - □ traditional courses because…….

Part II: INSTRUCTIONS: This is a questionnaire designed to gather data on learning preferences and attitude towards learning. After reading each item, please indicate the degree to which you feel that statement is true of you. Please read each choice carefully and circle the number of the response which best expresses your feeling.
There is no time limit for the questionnaire. Try not to spend too much time on any one item, however. Your first reaction to the question will usually be the most accurate.

ITEMS:	**RESPONSES**				
	Almost never true of me; I hardly ever feel this way.	Not often true of me; I feel this way less than half the time.	Sometimes true of me; I feel this way about half the time.	Usually true of me; I feel this way more than half the time.	Almost always true of me; there are very few times when I don't feel this way.
1. I'm looking forward to learning as long as I'm living.	1	2	3	4	5
2. I know what I want to learn.	1	2	3	4	5
3. When I see something that I don't understand, I stay away from it.	1	2	3	4	5
4. If there is something I want to learn, I can figure out the way to learn it.	1	2	3	4	5
5. I love to learn.	1	2	3	4	5
6. It takes me a while to get started on new projects.	1	2	3	4	5
7. In a classroom, I expect the teacher to tell all class members exactly what to do all the times.	1	2	3	4	5
8. I believe that thinking about who you are, and where you are going should be a major part of every person's education.	1	2	3	4	5
9. I don't work very well on my own.	1	2	3	4	5
10. If I discover a need for information that I don't have, I know where to go to get it.	1	2	3	4	5

ITEMS:	RESPONSES				
	Almost never true of me; I hardly ever feel this way.	Not often true of me; I feel this way less than half the time.	Sometimes true of me; I feel this way about half the time.	Usually true of me; I feel this way more than half the time.	Almost always true of me; there are very few times when I don't feel this way.
11. I can learn things on my own better than most people.	1	2	3	4	5
12. Even if I have a great idea, I can't seem to develop a plan for making it work.	1	2	3	4	5
13. In a learning experience, I prefer to take part in deciding what will be learned and how.	1	2	3	4	5
14. Difficult study doesn't bother me if I'm interested in something.	1	2	3	4	5
15. No one but me is truly responsible for what I learn.	1	2	3	4	5
16. I can tell whether I'm learning something well or not.	1	2	3	4	5
17. There are so many things I want to learn I wish that there were more hours in a day.	1	2	3	4	5
18. If there is something I have decided to learn, I can find time for it, no matter how busy I am.	1	2	3	4	5
19. Understanding what I read is a problem for me.	1	2	3	4	5
20. If I don't learn, it's not my fault.	1	2	3	4	5
21. I know when I need to learn more about something.	1	2	3	4	5
22. If I can understand something well enough to get a good grade on a test, it doesn't bother me if I still have questions about it.	1	2	3	4	5

ITEMS:	RESPONSES				
	Almost never true of me; I hardly ever feel this way.	Not often true of me; I feel this way less than half the time.	Sometimes true of me; I feel this way about half the time.	Usually true of me; I feel this way more than half the time.	Almost always true of me; there are very few times when I don't feel this way.
23. I think libraries are boring places.	1	2	3	4	5
24. The people I admire most are always learning new things.	1	2	3	4	5
25. I can think of many different ways to learn about a new topic.	1	2	3	4	5
26. I try to relate what I am learning to my long-term goals.	1	2	3	4	5
27. I am capable of learning for myself almost anything I might need to know.	1	2	3	4	5
28. I really enjoy tracking down the answer to a question.	1	2	3	4	5
29. I don't like dealing with questions where there is not one right answer.	1	2	3	4	5
30. I have a lot of curiosity about things.	1	2	3	4	5
31. I'll be glad when I'm finished learning.	1	2	3	4	5
32. I'm not as interested in learning as some other people seem to be.	1	2	3	4	5
33. I don't have any problem with basic study.	1	2	3	4	5
34. I like to try new things, even if I'm not sure how they will turn out.	1	2	3	4	5
35. I don't like it when people who really know what they're doing point out mistakes that I am making.	1	2	3	4	5
36. I'm good at thinking of unusual ways to do things.	1	2	3	4	5

ITEMS:	RESPONSES				
	Almost never true of me; I hardly ever feel this way.	Not often true of me; I feel this way less than half the time.	Sometimes true of me; I feel this way about half the time.	Usually true of me; I feel this way more than half the time.	Almost always true of me; there are very few times when I don't feel this way.
37. I like to think about the future.	1	2	3	4	5
38. I'm better than most people are at trying to find out the things I need to know.	1	2	3	4	5
39. I think of problems as challenges, not stopsigns.	1	2	3	4	5
40. I can make myself do what I think I should.	1	2	3	4	5
41. I'm happy with the way I investigate problems.	1	2	3	4	5
42. I become a leader in group learning situations.	1	2	3	4	5
43. I enjoy discussing ideas.	1	2	3	4	5
44. I don't like challenging learning situations.	1	2	3	4	5
45. I have a strong desire to learn new things.	1	2	3	4	5
46. The more I learn, the more exciting the world becomes.	1	2	3	4	5
47. Learning is fun.	1	2	3	4	5
48. It's better to stick with the learning methods that we know will work instead of always trying new ones.	1	2	3	4	5
49. I want to learn more so that I can keep growing as a person.	1	2	3	4	5

ITEMS:	RESPONSES				
	Almost never true of me; I hardly ever feel this way.	Not often true of me; I feel this way less than half the time.	Sometimes true of me; I feel this way about half the time.	Usually true of me; I feel this way more than half the time.	Almost always true of me; there are very few times when I don't feel this way.
50. I am responsible for my learning --no one else is.	1	2	3	4	5
51. Learning how to learn is important to me.	1	2	3	4	5
52. I will never be too old to learn new things.	1	2	3	4	5
53. Constant learning is a bore.	1	2	3	4	5
54. Learning is a tool for life.	1	2	3	4	5
55. I learn several new things on my own each year.	1	2	3	4	5
56. Learning doesn't make any difference in my life.	1	2	3	4	5
57. I am an effective learner in the classroom and one my own.	1	2	3	4	5
58. Learners are leaders.	1	2	3	4	5

© Lucy M. Guglielmino, 2008. All rights reserved.
Unauthorized reproduction prohibited.

Thank you very much for your cooperation

- - - - - - - - - - - -

You may contact any of the following individuals should you desire to discuss your participation in the study and/or request information about the results of the study: Panida Sukseemuang at phanida.s@psu.ac.th or at (074) 286769 or Dr. Adrienne Hyle, Ph.D., 325 Willard Hall, Dept. of Educational Studies Oklahoma State University, Stillwater, OK 74078, (405) 744-9893. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or irb@okstate.edu

Appendix G

Student Focus Group Interview Questions

The following are questions for focus group interviews:

1. Please describe what make you succeed/ not succeed in studying courses.
2. Tell me how you learn and how you solve learning problems.
3. What kind of course do you prefer? Please explain why you prefer hybrid or traditional courses.
4. Please explain why you do not prefer hybrid or traditional courses.
5. Tell me about your learning characteristics.
6. In your opinion, describe the important things needed for learning.
7. What do you think about this sentence, “the teacher is very important in the class”?

Some additional and related questions might be added during the interview.

Appendix H
OBSERVATION CHECKLIST

CHARACTERISTIC		GRID & GROUP TYPOLOGY	SUPPORTED	NOT SUPPORTED	NOT OBSERVED
1	**Multiple perspectives** and representations of concepts and content are presented and encouraged.				
2	Goals and objectives are **derived by the student** or in negotiation with the teacher or system.				
3	Teachers serve in the **role of guides**, monitors, coaches, tutors and facilitators.				
4	Activities, opportunities, tools and environments are provided to encourage **metacognition**, self-analysis -regulation, -reflection & -awareness.				
5	The student plays a **central role** in mediating and controlling learning.				
6	**Learning situations**, environments, skills, content and tasks are relevant, realistic, **authentic** and represent the natural complexities of the 'real world'.				
7	**Knowledge construction** and not reproduction is emphasized				
8	This construction takes				

	place in individual contexts and through social negotiation, **collaboration** and experience.				
9	The learner's **previous knowledge constructions**, beliefs and attitudes are considered in the knowledge construction process.				
10	**Problem solving** higher-order thinking skills and deep understanding are emphasized.				
11	**Consideration of errors** provides the opportunity for insight into students' previous knowledge constructions.				
12	**Exploration** is a favoured approach in order to encourage students to seek knowledge independently and to manage the pursuit of their goals.				
13	Learners are provided with the opportunity for **apprenticeship learning** in which there is an increasing complexity of tasks, skills and knowledge acquisition.				
14	Knowledge complexity is reflected in an emphasis on **conceptual interrelatedness** and				

	interdisciplinary learning.				
15	Collaborative and cooperative learning are favoured in order to expose the learner to **alternative viewpoints**.				
16	**Scaffolding** is facilitated to help students perform just beyond the limits of their ability.				
17	**Assessment is authentic** and interwoven with teaching.				
18	**Primary sources of data** are used in order to ensure authenticity and real-world complexity.				

Adapted from: Murphy, E. (1997). Constructivism: From philosophy to practice. (ERIC Document Reproduction Service No. ED 444 966).

VITA

Panida Sukseemuang

Candidate for the Degree of

Doctor of Education

Dissertation: SELF-DIRECTEDNESS AND ACADEMIC SUCCESS OF STUDENTS ENROLLING IN HYBRID AND TRADITIOANLCOURSES

Major Field: Applied Educational Studies

Biographical:

Education:

Doctor of Education 2009
Oklahoma State University

Master of Arts in Linguistics 1993
Chulalongkorn University

Bachelor of Arts in English 1988
Prince of Songkla University

Experience:

Lecturer 1991 to present
Faculty of Liberal Arts, Prince of Songkla University, Hat Yai

Teacher 1991-1990
Thong Por Wittaya School, Phang-Nga

Name: Panida Sukseemuang Date of Degree: July, 2009

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: SELF-DIRECTEDNESS AND ACADEMIC SUCCESS OF STUDENTS ENROLLING IN HYBRID AND TRADITIONAL COURSES

Pages in Study: 156 Candidate for the Degree of Doctor of Education

Major Field: Applied Educational Studies

Scope and Method of Study:

The purpose of this explanatory case study was to explore the relationship between student success in coursework, student preference for self-directed (online) or (teacher-directed) tradition classroom settings and instructional strategies of pedagogy and andragogy evidenced in PSU course offering.

Findings and Conclusions:

This study reveals that most students prefer traditional courses and they need a teacher to help them learn. The academic success of students enrolling hybrid courses is a little higher than that of students studying traditional courses. The activities are different but assessments designed for both courses are very similar. They support a pedagogical model. Students are generally wanting teacher-centered instruction, regardless of year in school, faculty (college) or type of course preferred. Instructional strategies tend to support and foster teacher-directed learning characteristics, teacher-directed.

Findings from this study can provide a clear picture of student and instruction in one university. This might affect the university learning policy, enabling the university administrators reconsider the present situation, adjusting and improving the learning context. In addition, this study might add more information to the Ministry of Education to rethink about the policy, and adjust or change instructional strategies to help the students promote life long learning.

ADVISER'S APPROVAL: Dr. Adrienne Hyle