# Students' Readiness for E-learning: A Case Study of Sukhothai Thammathirat Open University,Thailand

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## ABSTRACT

*The process of e-learning is the operations that involve humans, computers, the Internet, and instructional material, and that produces the outputs to learners and the organization. The purposes of this research were (1) to study students' readiness for e-learning of graduate students majoring in educational administration, School of Educational Studies,Sukhothai Thammathirat Open University ; (2) to compare students' readiness for e-learning of graduate students majoring in educational administration, as classified by gender, age, technology experience .The research sample consisted of 162 graduate students majoring in educational administration, obtained by simple random sampling. The research instrument was a rating scale questionnaire with .86 level of reliability.The statistics used for data analysis were percentage, mean, standard deviation, t-test, and ANOVA. The research findings showed that (1) the over all of students' readiness for e-learning of graduate students majoring in educational administration were ready status and category that Technology Access had the highest mean and Study skills,Technology skills had the lowest mean.; (2) There was no significant difference of the students' readiness for e-learning of graduate students majoring in educational administration as classified by gender,age groups, and technology experiences.It is recommend that the university should improve graduate students' readiness in Study skills, and Technology skills.*

## INTRODUCTION

Distance education is to promote self study or independent study among distance learners in the absence of regular face-to-face to face teaching (Simpson, 2001). The rapidly changing global economies enhance people and organizations to keep up with the rapid changes that define the Internet world. E-learning is a new education concept by using the Internet technology, it deliveries the digital content, provides a learner-orient environment for the teachers and students. To achieve this, every Distance Learning Institutions extend support to its learner, All these activities beyond the production and delivery of course material assist in the progress of students in term of learning, interacting and effective communication. As above mentioned, student support services provided by Distance Learning Institutions are still based on factors of the learning process such as attention, motivation, emotional aspects, and students' readiness to different e-learning strategies. Kanchana Chokriensukchai (2005)studied A Feasibility Study of Using E-Learning for Post-Graduate Studies. It found that e- Learning was saving time and money in traveling to school. The students were lack of technology skills and english. They had negative attitudes towards e- Learning. The lessons were not interesting.

Sukhothai Thammathirat Open University (STOU) was established in 1978. The university employs distance learning system that makes quality higher education accessible to all who wish to further their studies, especially adult learner. The main teaching materials have traditionally been print-based packages that are mailed to students. Presently, the university has begun offering two instructional approaches: one centered on printed core materials and the other on computer-based study materials. In 2013, The university will be provided the teaching through e-Learning for graduate students. The university prepares the readiness of instruc-

tor for e-Learning by short time training. The efficiency of e-learning built upon a unique relationship between learners and instructors. Most of graduate students in Educational Aaministration Department are working people who have an age range going from 30 to 60. They will learn to use Technology with the requirements of being a distance masteral student. There is a critical question of how to motivate them to fully be absorbed in the online learning process.It is necessary to understand graduate students' readiness for transition an adult learner into e-learning . Strategies need to be developed based on graduate students' readiness.

This study aimed to study students' readiness for e-learning and compare the personnel's opinions towards students' readiness for e-learning according of gender, age, technology experience of graduate students who attended in Educational Administration, School of Educational Studies, Sukhothai Thammathirat Open University.

## LITERATURE REVIEW

### E-learning

E-learning can be defined from different perspectives. There are specialists who consider that e-learning means any teaching process which integrates any form of technology, but there are others who claim that e-learning represents a teaching solution for distance education, facilitated by the massive penetration of internet as a form of communication. E-learning is rapidly growing as an acceptable way of education. Remarkable progress has been made in e-learning in couple of last decades (Raymond,2000).

Nichols (2003) defines the concept as the use of various technological tools that are either Web-based, Web-distributed or Web-capable for the purposes of education. Hoppe and Breitner (2003) describe e-learning as a learning which is supported and/or made possible by the use of modern ICT and computers. Newman (2008) defines e-learning as usage modern ICT to deliver learning and training programs.

One of the most popular forms of e-learning is online learning via the Web. Research suggests that to succeed in online learning, learners must be able to motivate themselves, manage their time wisely, take responsibility for their own learning, and participate in the give-and-take of electronic discussions (Collett, 2000, cited in Porter and O'Connor, 2001; Rovai, 2003; Smith, Murphy, &Mahoney, 2003). Furthermore, they must take initiative, be resourceful, demonstrate persistence, and believe in their ability to organize and carry out the actions needed to engage in learning (Derrick, 2003). Online learners need to be able to solve problems and to evaluate and monitor their own learning.

The nature of instruction also plays a big role in successful online learning, and online instructors vary in their ability to help students succeed. Johnson and Aragon (2003) identify the following seven general pedagogical principles as critical for success in online learning environments: (1) Address individual differences. (2) Motivate the students. (3) Avoid information overload. (4) Create a real-life context. (5) Encourage social interaction. (6) Provide hands-on activities. (7) Encourage student reflection.

As above mentioned, e-learning can be defined as web- based teaching and learning using computer, multimedia, and internet technologies. E-learning can frequently be viewed as a more varied approach to learning, which in turn may have an increased difficultly with obtaining success. As with traditional learning environments, the success with e-learning depends on both the instructor and learner itself. However, people often agree that e-learning requires a certain type of learner and even instructor. Overall, the conditions to ensure success simply revolve around two necessary parties; the learner and instructor. E-learning is a unique and relatively new concept as far as learning is concerned. Though important, without learners, e-learning would not be able to flourish. So much is dependant on learners for making this new form of distance learning success.

### Learner Readiness

The students or learners success with a variety of different learning styles, one must exhibit qualities such as self-determination and an overall strive for excellence. With these qualities being absent, the learner may struggle to move forth throughout the experience due to the many high demands. For adults, becoming a self-directed learner includes not only knowledge of study strategies but also practice and attitudes (Schrader-Naef, 1999). The readiness and ability for an adult to succeed in an online learning format

is furthered when there is a combination of appropriate learning environments with strategic training (Straka &Stockl, 1998).

Watkins *et al.* (2003) develop an instrument to measure an individual's perceived readiness to engage in e-learning. The instrument included several items which are technology access, online skills and relationships, motivation, ability to use online audio/video, ability to use Internet discussions, importance to learner's success.

The College of Business Administration at Tarleton State University offers an online orientation for all new online graduate students (Gaide, 2004). The orientation helps create a sense of welcome to new students, it provides an orientation to course requirements, it has modules that advise students about administrative issues and it familiarizes students with WebCT. The online orientation uses the same look and feel of its regular online courses enabling students to experience what they will in a real class.

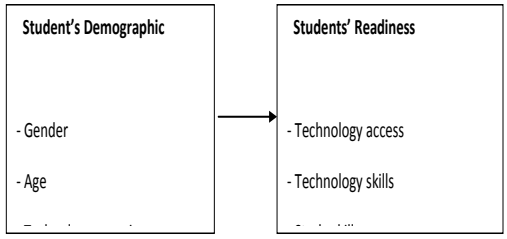
Newman( 2008) describes disadvantages of e-learning from participant point of view are as follows: (1) Feeling of isolation - Participants may feel isolated from their teacher and/or class mattes, because there are no physical contacts among participants.(2)Technology issues -Participants must have a computer with access to internet and other adherent equipment (e.g. printer, loudspeakers). In some places are internet connections inappropriate (e.g. lack of broad band internet). Slow internet connection could cause frustrations. (3) Basic computer skills - Participants in e-learning must have sufficient level of skills and knowledge how to use modern ICT and computers. Some peoples have phobias concerning using computers and modern ICT. Management of computer files and online software may be difficult for some participants.(4)Lack of self-discipline and self-motivation- Participants with lack of motivation and/or lower lever of self discipline may fall behind.(5)Problems and open dilemmas about most appropriate method of evaluating participants' work/success in e-learning process.

Jed Rosenberg(2009) describes ten strategies for a successful e-learning Experience. These strategies are as follows: (1)Time management- It is important that every online learner understand the need to arrange a time within their weekly schedule to dedicate to the online courses. (2)Web experience - Students should also be comfortable with various Internet tasks. Those tasks should include navigating the web, emailing, downloading and uploading files, and posting messages to a discussion board. (3)Awareness of written tones -Students need to also keep in mind when corresponding with instructors or peers, that tone is invisible. Humor and other human emotions are difficult to express when communicating electronically. (4)Form a virtual study group - This is a great one. With online learning, you will not have the regular day to day interaction with teachers and fellow students. Take time during the first week of the course to develop a virtual study group. (5)System requirements - A student enrolled in online course also needs to have the appropriate technology. Before beginning a course, students should install appropriate software, Internet browser versions, and multimedia plug-ins.(6)High motivation-Motivation is a key ingredient with online learning. It is essential for students to be highly motivated and have a positive attitude when attending online courses. Motivation will increase the student's success. (7)Interest in the subject - Learning online is a new experience for many people. Be willing to try and accept a new learning style. (8)Learning environment- Students should create an effective learning environment where they plan to study. (9)Take breaks - Students should also get into the habit of taking short, frequent breaks. (10) Avoid procrastination-Students should make an effort to avoid procrastination. To reduce stress, students need to complete assignments within an appropriate amount of time and not submit them at the last minute.

## CONCEPTUAL FRAMEWORK

Based on literature review, the conceptual framework of this study is represented below.

**FIGURE1**
**CONCEPTUAL FRAMEWORK OF THE STUDENTS'READINESS**



## RESEARCH METHODOLOGY

The researchers used quantitative procedures. The sample size for this research consisted of 162 graduate students who attended in Educational Administration, School of Educational Studies,2010. They were selected by simple random sampling. The data collection was gained through research questionnaires that distributed to the respondents. There were 2 sections in the questionnaire. Section 1 focused on the student's demographic according of gender, age, technology experience. Section 2 consisted of students' readiness that which were grouped into five aspects:technology access, technology skills, study skills, time management,and motivation. The five aspects, a total of 25 items were measured on a five-point Likert scale. Conducted Pilot. Testing questionnaire with a experimental group of 30 individuals who were not the sample and analyzed the data for accuracy by means of employing the Cronbach's alpha coefficient. The result of the reliability test was shown in Table 1.

**Table 1**
**Questionnaire Reliability Index**

| Readiness Category | Item | Cronbach's alpha |
|---|---|---|
| Technology access | 5 | 0.869 |
| Technology skills | 5 | 0.871 |
| Study skills | 5 | 0.845 |
| Time management | 5 | 0.853 |
| Motivation | 5 | 0.863 |
| Total | 25 | 0.860 |

The respondent were requested to state their readiness for e-learning by choosing one of the scale showed in Table2.

**Table 2**
**Scale Statement of Students' Readiness for e-Learning**

| | Strongly Not Ready | Not Ready | Moderate | Ready | Strongly Not Ready |
|---|---|---|---|---|---|
| Scale | 1 | 2 | 3 | 4 | 5 |

The data gained from respondents are analysis by using of mean score statistic and standard deviation. Statistic interpretation of readiness ((5-1)/5=0.8) is showed in Table3.

**Table 3**
**Interpretation of Students' Readiness for e-Learning**

| Mean Score Range | Interpretation of Readiness |
|---|---|
| 1.00 to ≤ 1.80 | Strongly Not Ready |
| > 1.80 to ≤ 2.61 | Not Ready |
| > 2.61 to ≤ 3.41 | Moderate |
| > 3.41 to ≤ 4.21 | Ready |
| > 4.21 to ≤ 5.00 | Strongly Ready |

The statistics used for data analysis were the percentage, mean, standard deviation, t- test, and one-way analysis of variance (ANOVA).

## RESULTS AND DISCUSSION

The student's demographic were analyzed that male respondents were represented by 45.06% and female was 54.94%. By age, they were grouped into four categories: 21 to 30 years old comprised of 2.46%, 31 to 40 years old was 32.09%, 41 to 50 years old was 39.53%, 51 to 60 years old was 25.92%.By technology experience , they were grouped into four categories: 5to 10 years comprised of 27.78%, 11 to 15 years was53.09%, 16 to 20 years was 19.1 3%, and above 20 years was represented by 19.13%.

Analysis on students' readiness is presented in Table 4.

**Table 4**
**Mean and Standard deviation of Students' Readiness (N=162)**

| Category | M | SD |
|---|---|---|
| Technology Access | 3.91 | .84 |
| Technology Skills | 3.68 | .66 |
| Study Skills | 3.65 | .72 |
| Time Management Skills | 3.83 | .82 |
| Motivation | 3.88 | .79 |
| Overall | 3.78 | .70 |

Table 4 indicated that the overall of students' readiness was rated at the ready status ; category of students' readiness could be ranked as follow :Technology Access, Motivation, Time management skills, Technology skills, and Study skills. These results are consistent with Straka and Stockl(1998), and Gaide (2004)who describe the readiness and ability for an adult to succeed in an

online learning format is furthered when there is a combination of appropriate learning environments with strategic training. The instructor offers an online orientation for all new online graduate students. The orientation helps create a sense of welcome to new students, it provides an orientation to course requirements, it has modules that advise students about administrative issues and it familiarizes students with Web CT. The online orientation uses the same look and feel of its regular online courses enabling students to experience what they will in a real class.

**Table 5**
**Mean and Standard deviation of Technology access**

| Technology access | M | SD |
|---|---|---|
| I have access to a computer on a daily basis. | 3.98 | .96 |
| I have access to a computer with an Internet connection at home. | 3.88 | .87 |
| I have a virus protection on my computer. | 3.96 | .97 |
| I have access to a computer with the necessary software install. | 3.92 | .90 |
| I have access to a computer in campus with stable internet connection. | 3.83 | .89 |
| Overall | 3.91 | .84 |

Table 5 indicated that the overall of Technology Access was rated at the ready status and item that I have access to a computer on a daily basis had the highest mean and I have access to a computer in campus with stable internet connection had the lowest mean..The results show the students must also have skills about some basic computer maintenance. These results are consistent with Newman(2008),and Jed Rosenberg (2009)who state the participants must have a computer with access to internet and other adherent equipment (e.g. printer, loudspeakers). A student enrolled in online course also needs to have the appropriate technology. Before beginning a course, students should install appropriate software, Internet browser versions, and multimedia plug-ins.

**Table 6**
**Mean and Standard deviation of Technology skills**

| Technology skills | M | SD |
|---|---|---|
| I can save/open documents to/ from a hard disk or other removable storage device. | 3.78 | .78 |
| I can navigate the WebPages. (go to next, or previous page) | 3.70 | .82 |
| I can send and receive email attachments. | 3.75 | .69 |
| I can resolve commons errors while surfing the internet such as page not found or connection time out. | 3.62 | .70 |
| I can use the advanced Internet skills, such as using a search engine, identifying and downloading appropriate files, and installing or updating software. | 3.60 | .71 |
| Overall | **3.68** | **.66** |

Table 6 indicated that the overall of Technology Access was rated at the ready status and item that I can save/open documents to/ from a hard disk or other removable storage device had the highest mean and I can use the advanced Internet skills, such as using a search engine, identifying and downloading appropriate files, and installing or updating software had the lowest mean. The result assessed students' level and confidence to use computers, to work with files, to log on to the Internet and navigate on the net, as well as their email skills. These results are consistent with Newman (2008),and Jed Rosenberg (2009) who cite the basic computer skills - participants in e-learning must have sufficient level of skills and knowledge how to use modern ICT and computers. Those tasks should include navigating the web, emailing, downloading and uploading files, and posting messages to a discussion board.

Table 7 indicated that the overall of Study skills was rated at the ready status and item that I can follow a structured approach to find solutions to a problem had the highest mean and I am comfortable doing academic work independently and without regular face-to-face interaction with an instructor had the lowest mean. These results confirm that students were ready to join an e-learning program and succeed due to their effective study habits.

**Table 7**
**Mean and Standard deviation of Study skills**

| Study skills | M | SD |
|---|---|---|
| I can follow a structured approach to find solutions to a problem. | 3.72 | .79 |
| I can communicate effectively with other students using online technologies. | 3.71 | .78 |
| I can express my thoughts and ideas in writing. | 3.64 | .72 |
| I can learn new technologies ; I do not put it off or avoid it. | 3.59 | .70 |
| I am comfortable doing academic work independently and without regular face-to-face interaction with an instructor. | 3.57 | .69 |
| Overall | 3.65 | .72 |

**Table 8**
**Mean and Standard deviation of Time management skills**

| Time management skills | M | SD |
|---|---|---|
| I can schedule time to provide timely responses to other students and/or the instructor. | 3.93 | .95 |
| I can control my desire to postpone important tasks. | 3.79 | .80 |
| I can get assignment done ahead of time. | 3.90 | .93 |
| I can sacrifice personal time to complete assignments and reading. | 3.92 | .91 |
| I have the self-discipline to log in and participate in an online course several times a week | 3.65 | .75 |
| Overall | 3.83 | .82 |

Table 8 indicated that the overall of Time management skills was rated at the ready status and item that I can schedule time to provide timely responses to other students and/or the instructor had the highest mean and I have the self-discipline to log in and participate in an online course several times a week had the lowest mean. The fact that the students had the possibility to change their daily schedule in such a way to fit with their study requirements due dates, made it possible to solve the problem of time management. A flexible e-learning program and an appropriate time management from e-learners will be ideal to solve the lack of time required from students to study. The results are consistent with Jed Rosenberg (2009) who explain the time management is important that every online learner understand the need to arrange a time within their weekly schedule to dedicate to the online courses.

**Table 9**
**Mean and Standard deviation of Motivation**

| Motivation | M | SD |
|---|---|---|
| I would be able to complete my study even when there are online distractions . | 3.97 | .90 |
| I can set goals and objectives for learning | 3.88 | .82 |
| I consider flexibility in time as an important motivating factor in taking an online class. | 3.82 | .81 |
| I enjoy learning that is both interesting and challenging . | 3.94 | .94 |
| I can remain motivated even though the instructor is not online at all times | 3.79 | .80 |
| Overall | 3.88 | .79 |

Table 9 indicated that the overall of Motivation was rated at the ready status and item that I would be able to complete my study even when there are online distractions (e.g., friends sending emails) had the highest mean and I can remain motivated even though the instructor is not online at all times had the lowest mean. The results are consistent with Jed Rosenberg (2009) who describes the motivation is a key ingredient with online learning. It is essential for students to be highly motivated and have a positive attitude when attending online courses. Motivation will increase the student's success.

Comparison students' readiness that contribute to success in the process of e-learning according of gender was presented in table 10.

**Table 10**
**t-test results for gender**

| Gender | N | M | SD | t | p |
|---|---|---|---|---|---|
| Female | 89 | 3.79 | .49 | 1.512 | .57 |
| Male | 73 | 3.91 | .68 | | |
| $p < .05$ | | | | | |

Table 10 indicated that the difference between female and male scores was not statistically sig-

nificant, although the males' mean score was higher than females' score.

There was no significant difference of the students'readiness for e-learning of graduate students majoring in educational administration as classified by gender,age, and technology experiences.

## RECOMMENDATIONS

The results of this study revealed that students' readiness were , overall, ready for e-learning, however, they need to improve their readiness in Study skills, and Technology skills as the following :

The instructors should evaluate their personal readiness and important readiness for student in e-learning process, which contribute to success in e-learning process. The low students 'readiness will be motivate by online learning experience. Potential students in e-learning process could be perform well in academic performance.

The instructors and their online colleagues should offer a wide variety of technical skills and academic skills modules such as student readiness orientation and foundations for academic success modules. The modules prepare the students for the online learning experience. The students will learn how to use the online classroom to get assignments, interact with instructors and other students, and submit assigned work.

The instructors should set of rules for behaving properly online, create opportunities for more active, interactive, online interactions and communications between students and themselves in e-learning contexts. The students must be able to read and understand complex materials, to express their thoughts and ideas in writing, to read and follow instructions alone, to set a personal schedule and complete assigned work by the required dates. The students must be willing to interact regularly with their instructor.

The University should provide access to technical support through help lines or other means. Help students troubleshoot technical problems that they may encounter in distance learning.

The University should provide professional development to ensure that instructors can effectively use e-learning tools in distance education. Instructors should be comfortable with the features of any curriculum or product they use, and they need to be able to adapt their teaching strategies to take full advantage of the technology.

The University should require the capacity to respond flexibly to the continually evolving needs and opportunities associated with e-learning. There should be regular studies of how faculty are teaching and how students are learning at the University as well as the roles that existing and emerging educational technologies might fill. A review of effective support strategies within Faculties might also encourage sharing best practices not only for teaching, but also for providing students support services.

## CONCLUSION

This study presented the results of a study on examine students' readiness that contribute to success in the process of e-learning . The analysis of the results showed that the students' readiness is Technology access, Motivation, Time management skills, Technology skills, and Study skills. They are important that all students feel comfortable with the process and technology of the e-learning as the willingness of learners is a key factor of a successful program. The instructors should find the effective ways for improving e-Learning for students. The instruction that is developed will be not only technologically workable but also effective from a student's readiness.

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