Learning Behavior and Problems with Online Learning of master's degree Students. College of Logistics and Supply Chain

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Abstract

This research aimed to 1. Study the online learning behavior of the master's degree students, College of Logistics and Supply Chain 2. Study the problems of online learning of the master's degree students, College of Logistics and Supply Chain The sample group used in this research was the master's degree students, College of Logistics and Supply Chain, Suan Sunandha Rajabhat University.

This research is a quantitative research. The sample group used in the research is the master's degree students, College of Logistics and Supply Chain, 200 people. The research instrument is a questionnaire as preliminary data by finding the percentage, mean and standard deviation.

The results of the research study found that 1) The majority of the sample group is female more than male, 115 people, accounting for 57.50 percent, and 85 people, accounting for 42.50 percent. 2) Online learning behavior The overall mean score was at the highest level, which was ($\bar{x}$ = 4.40, S.D. = 0.56). When considering each item, it was found that, first of all, attend classes online according to the schedule provided by the university regularly, which was ($\bar{x}$ = 4.75, S.D. = 0.44); 3) Problems in learning online, overall, the mean score was at a medium level, which was ($\bar{x}$ = 2.65, S.D. = 1.33). When considering the problems, it was found that, first of all, problems with learning, the mean score was at a medium level ($\bar{x}$ = 2.98, S.D. = 1.20); secondly, personal problems, the mean score was at a medium level ($\bar{x}$ = 2.81, S.D. = 1.03); thirdly, problems with learning support, the mean score was at a medium level ($\bar{x}$ = 2.65, S.D. = 1.54); and thirdly, problems with the environment. The mean values were low ($\bar{x}$ = 2.17, S.D.= 1.54), respectively.

Keywords: Behavior, Online, Learning, Problem

1. Introduction

The research on “Learning Behavior and Problems of Online Learning of Master's Degree Students, College of Logistics and Supply Chain” arose from the researcher's observation that the current situation of the COVID-19 pandemic is considered another historical event that has caused losses around the world. This situation has affected the lives of people, families, communities, and has covered the economic and sustainability impacts of Thailand and other countries around the world. The Thai government has placed great importance on controlling the spread of the COVID-19 virus. On April 16, 2021, the Thai government announced the implementation of the regulations under Section 9 of the Emergency Decree on Public Administration in Emergency Situations B.E. 2548 (No. 20) on regulations and practices as follows: 1) Prohibition of actions or activities that are at risk of spreading the disease, such as prohibiting the use of buildings or premises of all types of schools and educational institutions for teaching, exams, training, and prohibiting the organization of group activities. 2) Closing service establishments or places at risk of spreading the disease throughout the Kingdom. 3) Determining areas of situations, high-control areas, and controlled areas. 4) Abstaining or avoiding travel. 5) Abstaining from social activities. (Emergency Decree on Public Administration B.E. 2548, 2564) The situation has affected many aspects, including the economy, causing people to lose their jobs, reduce their income, and increase their debt burden. In terms of lifestyle, people have changed their standards, which have become a necessity in their daily lives, such as wearing face masks, carrying alcohol gel to clean their hands, and avoiding touching public objects. Many people have had to turn to learning and relying on online channels to live their lives (Wichian Manlae, Bunying Pratum, Surasak Kaew-on, and Korakot Chamnian, 2564). In terms of teaching management, the outbreak of the disease has also affected the education system. Because when students are together in universities, it becomes a source of virus outbreaks, so teaching at universities must be suspended. Therefore, teachers have adjusted their teaching to be more online, using a variety of online media, such as electronic messages, still images, audio, video, animated graphics, 3D images, e-learning, along with creating a more efficient learning environment through the Zoom application, Google classroom, Google meet, Microsoft team, Google Hangouts, etc. These messages allow all students in the classroom and teachers to communicate and exchange ideas without having to travel to meet. And can teach anywhere, anytime (Ratchakan Phonpakdee, 2020)

The COVID-19 outbreak has affected educational institutions nationwide to be ordered to close to prevent the spread of the disease. This has caused both students and teachers to adapt to online learning in order for the curriculum to continue. In addition, the impact of COVID-19 has caused most classrooms to be closed. Even though they have switched to online learning, it is not as effective as classroom learning. This has caused children to have problems with both interrupted learning and unprepared parents, lack of computer equipment, internet access, excessive screen time, and lack of interaction with friends. Finally, it causes stress for both children and teachers. Online learning is one of the most practical solutions to the COVID-19 situation. However, to do this, the country must have a good and cheap communication network and internet that everyone can access, including the inequality in terms of devices to be connected. However, it must be acknowledged that the development of infrastructure to accommodate these technologies. The arrival of online learning has made poor children and those who do not have access to technology even more so. Online learning is learning via the internet in the form of a computer. It is the use of modern technology

combined with the internet network to create high-quality interactive education without the need to travel. It is convenient and accessible quickly, anywhere, anytime. It is the creation of lifelong education for the population. Online learning It is a self-study via the Internet. Learners can choose to study according to their own preferences. In terms of the content of the study, it consists of text, images, audio, VDO and other multimedia. These will be sent directly to the learner via a Web Browser. All learners, teachers and classmates can contact, communicate, consult and exchange opinions in the same way as studying in a general classroom by using E-mail, Chat, Social Network, etc. Therefore, online learning is suitable for everyone. Learn anywhere and anytime. Therefore, the College of Logistics and Supply Chain, which organizes all subjects in the curriculum online throughout the academic year, the subjects responsible for the curriculum have organized the learning of the subjects through various software as they are comfortable with in organizing the teaching and learning, including using other programs or applications as appropriate to enhance the learning of students to gain knowledge, skills and competencies as specified in the curriculum. From such actions, the researcher is interested in studying the learning behavior and problems of master's degree students under the COVID-19 outbreak situation in order to use the survey results to develop online teaching management to be consistent with the online learning behavior of learners and improve and solve the problems. As well as using such information as a guideline for providing learning support services to students under the COVID-19 outbreak situation more effectively.

1.1 Research Objective

1. To study the online learning behavior of the master's degree students, College of Logistics and Supply Chain

2. To study the problems of online learning of the master's degree students, College of Logistics and Supply Chain

2. Methods

The study of learning behavior and problems of online learning of master's degree students, College of Logistics and Supply Chain is quantitative research. It aims to study the learning behavior and problems of online learning of master's degree students, College of Logistics and Supply Chain. A questionnaire was used as a tool for collecting data by surveying social media usage behavior. The details of the research methodology are as follows:

Research methodology

1. Population and sample

A group of master's degree students, College of Logistics and Supply Chain, Suan Sunandha Rajabhat University, a total of 200 people

2. Study method

The research instruments the researcher has determined the guidelines for conducting the research study by focusing on the learning behavior and problems of online learning of master's degree students, College of Logistics and Supply Chain, which is survey research. The researcher applied a questionnaire as a tool for collecting data. It is divided into 3 parts:

Part 1 General information of the respondents

Part 2 Online learning behavior

Part 3 Problems in online learning

Data Collection

The researcher collected data for this research by sending questionnaires to a sample of 200 people, who were master's degree students at the College of Logistics and Supply Chain, Suan Sunandha Rajabhat University. The completed questionnaires were returned to the informants for further data analysis.

After creating and testing the instruments, 200 sets were distributed to master's degree students at the College of Logistics and Supply Chain, Suan Sunandha Rajabhat University. 200, or 100 percent, were returned. The data obtained from the questionnaires were collected and analyzed by finding percentages, arithmetic mean ($\bar{x}$) and standard deviation (S.D.).

Data Analysis

The data obtained from the questionnaires collected from the sample group will be processed and analyzed using a ready-made computer program. The data will be analyzed according to the intended hypothesis and the statistics used to analyze the data for this research are as follows:

1. Data related to personal factors will be described using frequency and percentage.

2. Data related to behavior and problems in online learning will be distributed by frequency. For each answer, find the mean ($\bar{x}$) and find the standard deviation (S.D.) of each questionnaire in each aspect, including all aspects in each item.

3. Results and Discussion

The research on the study of learning behavior and problems of online learning of master's degree students, College of Logistics and Supply Chain has the objectives to 1) study the online learning behavior of master's degree students, College of Logistics and Supply Chain, 2) study the problems of online learning of master's degree students, College of Logistics and Supply Chain. The sample group used in this research is a group of master's degree students, College of Logistics and Supply Chain, totaling 200 samples. The data was collected by using a questionnaire. The data obtained from checking the questionnaires were analyzed by finding the percentage, mean ($\bar{x}$) and standard deviation (S.D).

Part 1 General information

From data collection using a questionnaire with a sample of 200 people, in terms of the status of the respondents, it was found that the majority of the sample were females more than males, 115 people, or 57.50 percent, and males, 85 people, or 42.50 percent, with the highest age group of 26-35 years, 121 people, or 60.50 percent, followed by the age of 36-45 years, 51 people, or 20.50 percent, the age of 17-25 years, 15 people, or 7.50 percent, and the age of 46 years and above, the lowest number, 13 people, or 6.50 percent.

In terms of electronic devices used for online learning, it was found that most of the respondents used tablets/iPads, 115 people, or 57.50 percent, followed by Laptop computers:

71 people, or 35.50 percent; smartphones: 9 people, or 4.50 percent; and desktop computers: 5 people, or 2.50 percent.

In terms of the places used for online learning, ranked from most to least, online learning at home was the most common, at 93 people, or 46.50 percent; followed by online learning at the dormitory, at 75 people, or 37.50 percent; online learning at a coffee shop, at 25 people, or 12.50 percent; and online learning at the university, at 7 people, or 3.50 percent.

In terms of the characteristics of the internet network used for online learning In order from most to least, they used home Wi-Fi, 93 people, or 46.50 percent, followed by dormitory Wi-Fi, 74 people, or 37.00 percent, mobile phone networks (4G/3G), 17 people, or 8.50 percent, university Wi-Fi, 13 people, or 6.50 percent, and public Wi-Fi, 3 people, or 1.50 percent. In terms of programs and applications required for online learning, in order from most to least, they used Google Meet, 89 people, or 44.50 percent, followed by Zoom Cloud Meetings, 62 people, or 31.00 percent, and Microsoft Teams, 49 people, or 24.50 percent.

Part 2 Online learning behavior of master's degree students, College of Logistics and Supply Chain

Table 1 Mean and standard deviation of opinions on online learning behavior.

Online learning behavior	$\bar{x}$	S.D.	Opinion level
1. Attend online classes according to the university's schedule regularly.	4.75	0.44	Highest
2. Ask the teacher questions related to the course/questions via chat regularly.	4.66	0.48	Highest
3. Learn more from teaching materials and media that the teacher uses in teaching regularly	4.58	0.53	Highest
4. Learn more from lecture clips that the teacher has created and assigned to study regularly	4.30	0.69	Highest
5. Learn more from other learning media that the teacher recommends, such as Website/Youtube/Podcast regularly	4.42	0.49	Highest
6. Study by yourself from books/textbooks regularly	4.15	0.60	High
7. Do exercises, projects and submit homework as assigned by the teacher regularly	4.01	0.52	High
8. Study by yourself from other learning media that you are interested in apart from studying regularly	4.38	0.72	Highest
Total	**4.40**	**0.56**	**Highest**

The overall online learning behavior has the highest mean score, which is ($\bar{x}$ = 4.40, S.D. = 0.56). When considering each item, it was found that, first, attend online classes according to the university's schedule regularly, which is ($\bar{x}$ = 4.75, S.D. = 0.44). Second, ask the teacher about the subject/questions via chat regularly, which is ($\bar{x}$ = 4.66, S.D. = 0.48). Third, learn more from teaching materials and media used by the teacher regularly, which is ($\bar{x}$ = 4.58, S.D. = 0.53), respectively.

Part 3 Problems in online learning of master's degree students, College of Logistics and Supply Chain

Table 2 Mean and standard deviation of opinions on problems in online learning.

Problems in online learning	$\bar{x}$	S.D.	Opinion level
Personal problems			
1. Having problems with eyesight, unable to stare at the electronic device screen for a long time	3.31	1.39	Medium
2. Feeling tired, discouraged, no motivation to study	2.39	1.01	Low
3. Having financial problems due to not being able to find extra income to use in studying	2.57	0.75	Low
4. Unable to control oneself to focus on studying continuously throughout the class	2.97	0.95	Medium
Total	**2.81**	**1.03**	**Medium**
Problems in online learning	$\bar{x}$	**S.D.**	**Opinion level**
Problems with learning support			
1. There are additional expenses for studying, such as buying electronic devices, telephone bills, internet signal bills, electricity bills, etc.	3.05	1.73	Medium
2. Unstable internet network signals causing disruptions during studying	2.74	1.60	Medium
3. Programs used for studying and submitting assignments are disrupted, unable to submit assignments on time	2.91	1.77	Medium
4. Unable to control oneself to focus on studying continuously throughout the class	2.31	1.33	Low
5. The old equipment used for studying cannot support the programs required for studying	2.27	1.29	Low
Total	**2.65**	**1.54**	**Medium**
Environmental problems			
1. The atmosphere does not promote learning, such as hot weather, loud noises that disturb concentration	2.50	1.94	Low
2. It is quite difficult to contact the learning support agency	1.90	1.21	Low
3. The place you live does not have an internet signal	2.13	1.46	Low
Total	2.17	1.54	Low
Learning problems			
1. Online learning makes students distant from outsiders or people around them.	2.81	0.98	Medium
2. Online learning makes it inconvenient to consult with friends or ask teachers.	2.97	1.22	Medium

Problems in online learning	$\bar{x}$	S.D.	Opinion level
3. Each class period is too long.	2.71	0.91	Medium
4. Unable to follow the content that the teacher teaches in time/can't understand the lesson.	3.17	1.44	Medium
5. Teachers use many programs to teach, causing confusion.	3.22	1.48	Medium
Total	**2.98**	**1.20**	**Medium**
Overall Overview	**2.65**	**1.33**	**Medium**

The overall online learning problems have a medium mean score, which is ($\bar{x}$ = 2.65, S.D. = 1.33). When considering the problems, it was found that, first, problems in learning The average value was at a moderate level ($\bar{x}$ = 2.98, S.D. = 1.20), ranked 2nd as personal problems, the average value was at a moderate level ($\bar{x}$ = 2.81, S.D. = 1.03), ranked 3rd as problems in learning support, the average value was at a moderate level ($\bar{x}$ = 2.65, S.D. = 1.54), and the environmental problems, the average value was at a low level ($\bar{x}$ = 2.17, S.D. = 1.54), respectively.

When classified by aspect, it was found that personal problems ranked first as problems with vision. Unable to stare at the electronic device screen for a long time ($\bar{x}$ = 3.05, S.D. = 1.73), second place, unable to control oneself to concentrate on studying continuously throughout the class ($\bar{x}$ = 2.97, S.D. = 0.95), and third place, having financial problems due to being unable to find extra income to use for studying ($\bar{x}$ = 2.57, S.D. = 0.75), respectively.

Problems with learning support, first place, having additional expenses for studying, such as buying electronic devices, telephone bills, internet signal bills, electricity bills ($\bar{x}$ = 3.31, S.D. = 1.39), second place, programs used for studying and submitting assignments are disrupted. Unable to submit assignments on time ($\bar{x}$ = 2.91, S.D. = 1.77) and thirdly, unstable internet network signal causing disruption during study ($\bar{x}$ = 2.74, S.D. = 1.60), respectively.

Environmental problems, first of all, the atmosphere does not support learning, such as hot weather, loud noises that disturb concentration ($\bar{x}$ = 2.50, S.D. = 1.94), secondly, the place where one lives has no internet signal ($\bar{x}$ = 2.13, S.D. = 1.46), and thirdly, it is quite difficult to contact the learning support unit ($\bar{x}$ = 1.90, S.D. = 1.21), respectively.

Learning problems, first of all, the teacher uses many programs in teaching, causing confusion ($\bar{x}$ = 3.22, S.D. = 1.48), secondly, unable to follow the content that the teacher teaches in time/cannot understand the lesson ($\bar{x}$ = 3.17, S.D. = 1.44), and thirdly, Online teaching makes it inconvenient to consult with friends or ask teachers ($\bar{x}$ = 2.97, S.D. = 1.22), respectively.

Discussion

From the research study on “Learning Behavior and Problems of Online Learning of master’s degree Students, College of Logistics and Supply Chain”, there are interesting findings regarding the learning behavior and problems of online learning that differ according

to the demographic characteristics. The research results can be discussed as follows: The results of the study on the online learning behavior of Master's Degree students, College of Logistics and Supply Chain found that most students study online using their own tablets/iPads and laptops, which is consistent with the research of Wattanaporn Chaturanont et al. (2020) who studied the online learning behavior and satisfaction with the online Chinese learning management of students in the Bachelor of Education Program, Chinese Language Program, Faculty of Education, Burapha University. It was found that most students use tablets/iPads and laptops to study online as well. This is because digital technology has played a role in people's lives in general, both in terms of work and daily life, using various electronic devices as tools. In particular, the new generation or youth in the Gen Z group who were born with these things can learn about life in a digital society, with wireless communication via the Internet, spending most of their time online, and receiving various information quickly. (Understanding the Differences of 4 Generations, Breaking the Gap for Happy Work, 2019) In terms of the places where students study online, it was found that most students study online from their own homes because the blended learning approach allows some students who live in the provinces to study without having to travel. This is consistent with the finding that most students use their home Wi-Fi to study online, perhaps because the internet signal from a wireless network or Wi-Fi is better and more stable than the internet signal from a mobile phone network (4G/3G). However, there is another group of students who live in dormitories near the university area who, in addition to using their mobile phone networks, also use the university's Wi-Fi to study online. All students use Google Meet to study because it is the main program assigned to teachers to use in online teaching. However, teachers also use other programs and applications that teachers are familiar with and see as appropriate for teaching in the subjects they are responsible for, such as Zoom Cloud Meetings, Line, Facebook Group/Facebook Live, Google Meet, etc., because in online teaching, teachers can choose a variety of platforms to communicate with students. Because each platform has its own advantages and disadvantages (Siriporn Inthasan, 2020, p. 207)

In terms of online learning behaviors that are expressed with responsibility and consistency, graduate students at the College of Logistics and Supply Chain have the most overall such behaviors. Attending online classrooms according to the schedule arranged by the university regularly is the behavior that students show the most. The next behavior is asking teachers questions related to the course/questions via chat regularly. Similarly, Wattanaporn Chaturanon et al. (2020) found that students have the most real-time online learning behaviors according to the class schedule. This is in the same direction as the research of Phongsathon Sittichan et al. (2021) who found that in online learning, students can attend classes according to the class schedule and participate in class the most. From the results of the study, it can be explained that in online teaching, teachers are still an important factor that will stimulate and encourage students to study and find knowledge according to the goals of the subject. They also play a role as guides, mentors, and coaches and facilitate. (Facilitators) to help learners realize their own learning potential (Witthaya Vayo et al., 2020). The behaviors that students showed the least were doing exercises, assignments, and submitting homework as assigned by the teacher consistently. This may be because self-study from learning media in the form of documents or content that teachers place on online platforms and allow learners to study by themselves may be difficult to understand and lack interaction between learners and teachers, which causes boredom and may affect learners' learning outcomes (Krittaporn Sinchai and Ong-art Jeyahlee, 2020). Therefore, teachers must learn digital skills and practice using technology media used in teaching all the time. In

addition to lecturing, summarizing content, and doing online classroom activities, teachers should create other interesting learning media or find other learning resources related to the subject to introduce to students to learn more in addition to documents.

4. Conclusion

1. There should be a study of students' online learning behavior and opinions on online teaching and learning, in order to use the results of the study to develop online teaching and learning management in line with the online learning behavior of each group of students, or to study and compare online teaching and learning and traditional learning to compare the learning achievements of students to see how they differ.

2. There should be a survey of teachers' needs for support for online teaching and learning management, to use the results of the study as a guideline for management and support for online teaching and learning management.

3. Teachers should use only one platform for teaching and learning, such as Microsoft Teams, according to the university's regulations, to avoid confusion among students. The faculty or university should make teachers understand and strictly comply with the conditions or discuss together to create good practices for effective online teaching and learning to be used as a guideline for conducting online teaching and learning activities in the next semester.

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