



Flexible Online Lesson Development to Improve Communication Literacy

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Abstract

The purpose of this study was to investigate the problems and hurdles of online learning in the SHSS 144 Principles of Communication course, as well as the factors affecting the achievement of communication learning, in order to recommend flexible online learning. Three executives and full-time teachers with at least two years of online teaching experience were interviewed, and 103 students who elected to take the Principles of Communication course completed questionnaires. Included in the utilized statistics are percentage values, standard deviations, and multiple regression analysis. Studies have demonstrated that online learning has limitations in terms of learning exchanges and individual student assessments. On the part of the teachers, there were some worries since they needed to have more information than the substance of the instruction and the need to prepare for teaching more. There were a few problems with the equipment for online learning on the part of the students, but online learning has weaknesses that can easily lead to assessment fraud. In addition, communication training has the greatest impact on the achievement of communication literacy. It must focus on the student in order for them to recognize the benefits of training, so they opt to take the Principles of Communication course. In order to standardize hybrid learning, however, colleges are advised to consider the distinctions in challenges between online and on-site learning. In addition to flexible online learning, courses, timings, and activities must also be adaptable and suited to the needs of the students.

Introduction

This was the beginning of a kind of communication that allowed humans to comprehend the transmission of ancestral civilizations from one generation to the next, as human society has learnt the behavior of living things through imitation of behavior until it became adept in speech and language (Delafield-Butt & Trevarthen, 2013). These innovations have continuously altered the

human way of life until human civilization has began to employ information and communication technology to enhance the quality of life in order to acquire new knowledge and develop social interactions (Roy & Samaddar, 2016). Nevertheless, the purpose of communication has not altered between the past and the present.

Today, the emergence of globalization has

facilitated the elimination of geographical obstacles to contact, thereby facilitating the exchange of information and experiences (Cingi, 2018). It also influences the management of education, particularly at the higher education level, which emphasizes communication design and contemporary media production, innovation to create inventions and lessons creatively and the investigation of the weaknesses of the learning management model affecting the change during the transition into the 21st century internationalization. It is also the process of maximizing the potential of human capital to set the groundwork for future economic and social progress (Strielkowski, Grebennikova, VRazinkina, & Rudenko, 2021). Nevertheless, the quality of education results from the adaptation of educational institutions to the unavoidable global dynamics of society.

Due to the global spread of the COVID-19 virus, schools in Thailand must temporarily close to prevent the disease's transmission. Additionally, there are policies and steps to enhance safety at the beginning of the semester (Department of Health, 2020). This adaptation of the school has resulted in all levels of online learning, which is a problem for educators, students, and parents (Duraku & Hoxha, 2020). However, the struggles to shift the learning management process should reflect the value of the utilization of technology as a tool for passing on knowledge rather than communication facilities. In addition, for the enhancement of the learner's potential, the learning environment should be considered along with lessons that support growth during the age of learning.

Mahidol University, an educational institution that has been affected and has also adapted, has issued measures to limit the spread of the virus and developed norms that are consistent with the current scenario. In the past, online teaching has been organized, but according to research and analysis of academic publications, challenges and hurdles in online teaching and learning management have not been overcome in terms of teaching environment, classroom participation, etc (Gillett-Swan, 2017). This, along with the search for characteristics affecting online education, is a crucial gap affecting the success or failure of instructors' and students' communication (Dahlia, 2020). In addition, the knowledge that is suppressed from the passive learning of the learners could not reflect the demands based on the context of today's rapidly developing society to boost educational accomplishment, it is necessary to have a

comprehensive understanding of how to design acceptable online teaching lessons.

The above statement pointed out that a learning activity requires a clear and steady direction to develop effective learning plans by considering the learning concept of the learners as the main concept to foster diverse and creative collaborative learning (Nesusin, Intrarakhamhaeng, Supadol, Piengkes, & Poonpipathana, 2014). However, flexible online teaching lessons along with a combination of digital and non-digital technologies are crucial. This guarantees a continuation of the teaching style to suit the needs of the learners and to effectively drive the teaching process (Santiago, Ulanday, Centeno, Bayla, & Callanta, 2021). If the online lessons are flexible, it will facilitate learners to access the knowledge in a timely manner along with various learning alternatives. This can also improve learning opportunities which can effectively be applied in daily life.

However, the researcher is a professor at Mahidol University's Faculty of Social Sciences and Humanities, Department of Social Sciences, for such significant issues. In addition, the researcher is in charge of the SHSS 144 Principles of Communication course, recognizing the significance of a course that focuses on the principles and aspects of communication in multiple dimensions in accordance with the MU Literacy requirements. Therefore, the researcher examined the creation of adaptable online lessons for enhancing communication literacy. Currently, online teaching and learning management play a significant role in constructing a body of knowledge and understanding between teachers and students, as well as in developing students' potential within the constraints of online teaching. It is also a review of the teaching method of SHSS 144 Principles of Communication and an investigation of the elements impacting the accomplishment of communication literacy according to the MU Literacy approach. This will result in the development of adaptable, efficient, and successful online lessons.

Objectives

This study aimed to study the problems, factors, and effectiveness of communication according to the MU Literacy in online learning in SHSS 144 Principles of Communication to deliver policy and practical data for the development of flexible online lessons.

Conceptual Framework

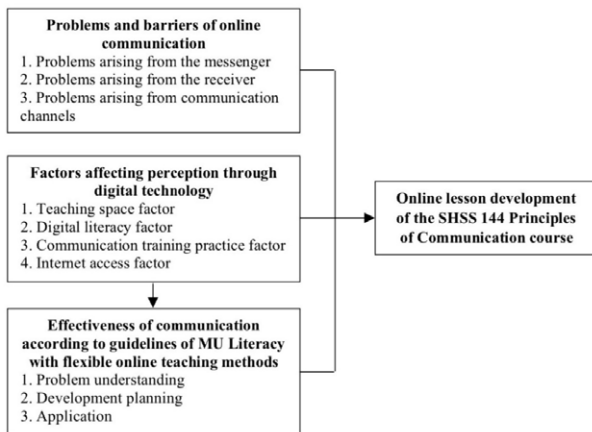


Fig. 1 Flexible Online Lesson Development Concepts for Developing Communication Awareness

The literature reviews can be expressed using the diagrams in order to develop a conceptual framework for study. In other words, the concepts of Goldbart & Caton (2010), Haddon (2006), Alawamleh, Al-Twait, & Al-Saht (2020) were used to synthesize a study on the barriers to online communication (2020). It has been divided into three categories: 1) Messaging issues pertain to the manifestation of comprehensible student behavior, familiarity between teachers and students, and adaptation to the online learning environment. 2) Audience concerns necessitate preparation for online learning, classroom involvement, engagement building, and instructional motivation. 3) Problems originating from communication channels refer to conditions that make it impossible to continue teaching or fail to achieve the expectations of the teacher.

The concept of Badia, Meneses, Sigales, & Fabregues (2014) was utilized as the basis for establishing factors for the research of factors influencing cognition through digital technology. Then, the appropriate academics were enlisted to explain the meaning in order to provide clearer definitions and indications by creating the following four factors: 1) Teaching space element is allowing students to express their thoughts through online communication channels and utilizing the space for learning and developing student potential. 2) The digital literacy element relates to students' comprehension of the digital transformation, as demonstrated by their abilities, creativity, teamwork, and invention. 3) The communicative training component refers to the student's choice of a course or program that satisfies their

post-graduation requirements. 4) Students may access the Internet even in remote locations, and there are no impediments to e-learning or online education.

The objectives of SHSS 144 Principles of Communication (Principle of Communication) were set in accordance with the MU Literacy approach and the flexible online teaching technique for measuring communication achievement. It also utilizes data from Academic Affairs (2021) on the Mahidol University Extension (MUx) system, which is comprised of the following three accomplishments: 1) The ability to comprehend and explain communication problems at the human, organizational, and social levels signify problem comprehension. 2) Development planning enables students to develop solutions to communication-related difficulties rapidly and in accordance with the existing scenario. 3) Application implies that students are able to integrate information, attitudes, and personal identities in communication in order to apply knowledge effectively to digital communication technologies.

However, the theory on the development of online teaching is the basis of this study. In other words, practices and techniques are required based on the future direction of work with an emphasis on the application of technology to create a higher level of learners' awareness (Smyshlyak, 2020). This includes the effective learning design for e-learning in an interdisciplinary way to create a learner's self-learning method. This is the key to the development of online lessons (Fujita, 2020), as well as the acceptance of the mechanisms of social expectation towards the direction of communication learning development under globalization.

However, the research conceptualization is designed to illustrate merely the research study's subject matter. The study's findings must take into account the context and interrelationships of the numerous components that influence the direction of the creation of flexible and applicable online classes.

Research Methodology

A research investigation on the creation of adaptable online lessons for enhancing communication literacy. The researcher has created the following research methodology:

1. Population and Sample

In this study, the researchers began studying and reviewing the literature on the concepts of communication principles, digital awareness, and online learning assessment in order to formulate the study's

criteria. The researcher studied at the teaching area of Mahidol University's Faculty of Social Sciences and Humanities' SHSS 144 Principles of Communication course. The key informants included three executives and full-time teachers obtained by purposive sampling. For the inclusion criteria, 1) a candidate is educational personnel of the Faculty of Social Sciences and Humanities, Mahidol University. 2) A candidate has an online teaching experience of more than 2 years. 3) A candidate used to teach Principles of Communication course or similar courses. The sample group included 103 students who are studying in the Faculty of Social Sciences and Humanities, Mahidol University with at least 4 weeks in learning Principles of Communication course, obtained from Krejcie and Morgan's table (Krejcie & Morgan, 1970).

2. Research Instrument

In this study, both qualitative and quantitative research approaches were employed. It begins with social science communication study, followed by documenting, analyzing, and synthesizing records. In addition, a literature analysis of the concepts of communication principles, digital awareness, and evaluation of learning through online instruction is utilized to develop a conceptual framework for the research. Moreover, the research instrument was validated in 2 parts: 1) validity in terms of the IOC value of 0.93, and 2) the reliability value, resulting in the alpha value of 0.77, which was suitable for research data collection.

Regarding the qualitative research approach, the researchers initially conducted interviews with executives who had expertise with online instruction. The data was then presented in an interview with a full-time instructor who teaches the Communication Principles course or equivalent courses and has experience with online instruction. Afterwards, researchers collected data from students enrolled in SHSS 144 Principles of Communication as part of a quantitative research study. Four questionnaires were employed as follows: 1) general information, 2) factors affecting the perception through digital technology, 3) the achievement of the communication based on the MU Literacy, and 4) recommendations for the development of online lessons, totaling 22 items. In accordance with the directive for the creation of adaptable online lectures, the researcher will outline the study criteria and recommendations.

3. Collection of Data

This study begins with a comprehensive

analysis of the SHSS 144 Principles of Communication course in order to comprehend the teaching and learning setting. It also entails examining concepts, theories, and related research articles for use in developing study guidelines, as well as constructing semi-structured interviews and questionnaires, after which the researcher selects a date for interviewing key informants. The researcher spent time after school and employed an online strategy to collect data from student questionnaires by delivering links and QR Codes to students on a voluntary basis. Once the data has been collected, it will be reviewed once more before the study results are evaluated and synthesized.

4. Data Analysis

For this study, analytic induction was employed to analyze qualitative data as the interpretation of the conclusion from the interview on problems and obstacles of online communication as well as the interpretation of questions on factors affecting perception through digital technology and the achievement of the communication based on the MU Literacy for the development of flexible online lessons. To analyze quantitative data, the SPSS for Windows was used using descriptive statistics to measure the level of factors affecting the perception of digital technology, consisting of a frequency distribution, namely the percentage, the measure of variation, namely the standard deviation, and the Multiple Regression Analysis. This is to analyze more than 1 independent variable or predictor variable (X) using the stepwise model to obtain the predictive relationship for the factors affecting the achievement of the communication based on the MU Literacy for flexible online teaching.

Results

The research on the development of adaptable online classes for the improvement of communication literacy may be broken down into three categories.

1. Problems and obstacles of online learning

1.1 Problems with messengers: At now, online teaching and learning in universities are particularly applicable to disciplines that need students to concentrate on expressing themselves, forming groups, and doing activities. As the Communication Principles course includes interaction between instructors and students, this can be regarded extremely limited. Initially, it was discovered that the teachers were very apprehensive because they lacked expertise with online teaching and had to construct activities that were compatible with

online learning. It is a novel subject to which teachers must adapt before students.

Learning and acquainting oneself with the online teaching method varies from instructor to instructor due to their varying emphasis on organizing the teaching process. Therefore, the teacher must have greater knowledge than the course subject and be able to adjust it effectively while designing course material. Adapting to the environment of online teaching is problematic and challenging due to the fact that each instructor has learning constraints.

1.2 Students registered in the Communication Core course or in other disciplines at the beginning of the semester, primarily as a result of senior recommendations and student expectations that favor classroom learning over online learning. This causes a small number of issues with the availability of devices and the Internet, roughly five percent, and is required for online learning.

Obviously, this lack of preparation leads to problems with students' abilities to use technology or

organization. However, because to the constraints of the university that primarily supports one of these platforms, it can be inconsistent and cumbersome for students at times. In addition to the issues associated with online platforms, there are restrictions surrounding the exchange of learning and individual learner evaluations that are either impossible or difficult to implement.

In addition, problems develop during the usage of the online platform due to the unpredictability of Internet system signal interruptions. According to the expectations of teachers and students, connection failures for educating pupils with a set and limited time period result in lower academic accomplishment than anticipated. This is something that can occur from both the teacher's and the student's perspective.

2. Factors Affecting the Achievement of Communication Literacy

2.1 The level of communication cognition factors, i.e., the overall average, was the greatest and the standard deviation was 0.703, which may be defined in detail according to the factor means as follows:

Table 1 Teaching space factor

Details of teaching space factor	Satisfaction level *					Mean (SD)	Interpret
	Highest n (%)	High n (%)	Moderate n (%)	Low n (%)	Lowest n (%)		
Students who were able to express ideas or ask questions to their teachers during their online classes at any time.	51 (49.5)	40 (38.8)	10 (9.7)	1 (1.0)	1 (1.0)	4.35 (0.776)	Highest
Students can utilize the teaching area (WebEX) to learn and improve their potential during online classes	43 (41.7)	37 (35.9)	21 (20.4)	2 (1.9)	-	4.17 (0.822)	High
The WebEX system allows students to employ a combination of technology and other options to maximize their learning, such as apps	51 (49.5)	46 (44.7)	6 (5.8)	-	-	4.44 (0.605)	Highest
Total average						4.32 (0.705)	Highest

* A mean score of 1.00–1.80 indicates the lowest level of satisfaction. A mean score of 1.81–2.60 indicates a low level of satisfaction. A mean score of 2.61–3.40 indicates a moderate level of satisfaction. A mean score of 3.41–4.20 indicates a high level of satisfaction. A Mean score of 4.21–5.00 indicates the highest level of satisfaction.

the platform to study successfully, which the instructor can witness during practice sessions or class activities. Moreover, the online student assessments reflect the students' susceptibility to exam dishonesty due to the ease with which they might identify ways to cheat. Although teachers were aware of this significant issue, they had to adjust their evaluation methods multiple times since online activities were unable to accurately measure educational performance.

1.3 Problems induced by communication channels: Online teaching and learning in communication courses necessitates a platform suited to activity

From Table 1, the teaching space factor had a mean (\bar{x}) of 4.32 and a standard deviation of 0.705. The WebEX system allows students to employ a combination of technology and other options to maximize their learning, such as apps, with the highest average (\bar{x}) being 4.44 and the standard deviation (SD) being 0.605. With a mean (\bar{x}) of 4.35 and a standard deviation (SD) of 0.776, this was followed by students who were able to express ideas or ask questions to their teachers during their online classes at any time. Students can utilize the teaching area (WebEX) to learn and improve their potential during online classes, with a mean (\bar{x}) and standard deviation (SD) of 4.17 and 0.822, respectively.

Table 2 Digital literacy factor

Details of digital literacy factor	Satisfaction level					Mean (SD)	Interpret
	Highest n (%)	High n (%)	Moderate n (%)	Low n (%)	Lowest n (%)		
Students demonstrated a high degree of knowledge and comprehension of technological/digital transformation.	40 (38.8)	39 (37.9)	23 (22.3)	-	1 (1.0)	4.14 (0.829)	High
Students were able to apply their digital knowledge to something new or display creativity.	37 (35.9)	48 (46.6)	16 (15.5)	2 (1.9)	-	4.17 (0.755)	High
Students can utilize digital knowledge for group work or knowledge sharing among group members.	47 (45.6)	49 (47.6)	7 (6.8)	-	-	4.39 (0.614)	Highest
Total average						4.22 (0.692)	Highest

From Table 2, the digital literacy factor got the greatest mean () of 4.22 and the smallest standard deviation (SD) of 0.692. The greatest mean (\bar{x}) is 4.39 and the standard deviation (SD) is 0.614; hence, it is possible to discuss in depth how students can utilize digital knowledge for group work or knowledge sharing among group members. With a high-level mean (\bar{x}) of

4.17 and a standard deviation (SD) of 0.75, students were able to apply their digital knowledge to something new or display creativity with a score of 0.75. Students demonstrated a high degree of knowledge and comprehension of technological/digital transformation (\bar{x}) of 4.14 and SD of 0.829.

Table 3 Internet access factor

Details of internet access factor	Satisfaction level					Mean (SD)	Interpret
	Highest n (%)	High n (%)	Moderate n (%)	Low n (%)	Lowest n (%)		
E-learning provided students with rapid access to the university's internet.	38 (36.9)	51 (49.5)	11 (10.7)	3 (2.9)	-	4.20 (0.746)	High
Under the current COVID-19 situation, students have flexible access to the Internet both on and off campus.	39 (37.9)	43 (41.7)	19 (18.4)	2 (1.9)	-	4.16 (0.789)	High
Students perceive the continuous improvement and modernization of the university's Internet platform.	40 (38.8)	49 (47.6)	10 (9.7)	4 (3.9)	-	4.21 (0.775)	Highest
Total average						4.19 (0.755)	High

From Table 3, the internet access factor had a mean (\bar{x}) of 4.19 and a standard deviation of 0.755. With a mean (\bar{x}) of 4.21 and a standard deviation (SD) of 0.775, it can be concluded that students perceive the continuous improvement and modernization of the university's Internet platform. E-learning provided students with

rapid access to the university's internet, with a mean (\bar{x}) of 4.20 and a standard deviation (SD) of 0.746. Under the current COVID-19 situation, students have flexible access to the Internet both on and off campus, with an average high (\bar{x}) of 4.16 and a standard deviation (SD) of 0.789, respectively.

Table 4 Communication training practice factor

Details of communication training practice factor	Satisfaction level					Mean (SD)	Interpret
	Highest n (%)	High n (%)	Moderate n (%)	Low n (%)	Lowest n (%)		
The decision of students to enroll in the main communication course was based on the knowledge gained after completing the course.	33 (32.0)	53 (51.5)	14 (13.6)	3 (2.9)	-	4.13 (0.750)	High
Students are interested in the principles of communication due to personal interest, course content, and organizational culture that promotes learning.	31 (30.1)	54 (52.4)	14 (13.6)	4 (3.9)	-	4.09 (0.768)	High
Students anticipate that the communication training will enable them to apply their own communication skills.	49 (47.6)	42 (47.6)	10 (9.7)	2 (1.9)	-	4.34 (0.735)	Highest
Total average						4.18 (0.721)	High

From Table 4, the communication training practice factor had a high mean (\bar{x}) of 4.18 and a standard deviation (SD) of 0.721. With a mean (\bar{x}) of 4.34 and a standard deviation (SD) of 0.735, the students anticipate that the communication training will enable them to apply their own communication skills. The decision of students to enroll in the main communication course was based on the knowledge gained after completing the course with a high-grade point average (\bar{x}) of 4.13 and a standard deviation (SD) of 0.750. Lastly, students are interested in the principles of communication due to personal interest, course content, and organizational culture that promotes learning, as measured by a mean (\bar{x}) of 4.09 and a standard deviation (SD) of 0.768.

2.2 The level of communication literacy achievement, that is, the overall mean, was high (\bar{x}) of 4.17 and the standard deviation (SD) was 0.633. The specifics can be described as follows based on the means of accomplishment:

From Table 5, application achievement was at the highest level (\bar{x}) of 4.25 and the standard deviation was 0.638. Students' perceptions of the importance of applying communication principles and elements, such as leadership in communication or change management, which had the highest mean and standard deviation (\bar{x}) of 4.31 and 0.638, can be analyzed in detail. With a mean (\bar{x}) of 4.26 and a standard deviation (SD) of 0.641, students were able to apply their knowledge of communication in conjunction with other technology and information in an appropriate manner. Students are able to integrate their knowledge, attitudes, and personal identities in order to design communication methods that are well-suited to a variety of contexts or communication environments, where the mean (\bar{x}) of 4.17 and standard deviation (SD) were 0.701, respectively.

Table 5 Application achievement

Details of application achievement	Satisfaction level					Mean (SD)	Interpret
	Highest n (%)	High n (%)	Moderate n (%)	Low n (%)	Lowest n (%)		
Students were able to apply their knowledge of communication in conjunction with other technology and information in an appropriate manner.	37 (35.9)	57 (55.3)	8 (7.8)	1 (1.0)	-	4.26 (0.641)	Highest
Students are able to integrate their knowledge, attitudes, and personal identities in order to design communication methods that are well-suited to a variety of contexts or communication environments.	33 (32.0)	56 (54.4)	12 (11.7)	2 (1.9)	-	4.17 (0.701)	High
Students' perceptions of the importance of applying communication principles and elements, such as leadership in communication or change management.	40 (38.8)	57 (55.3)	4 (3.9)	2 (1.9)	-	4.31 (0.642)	Highest
Total average						4.25 (0.638)	Highest

Table 6 Problem understanding achievement

Details of problem understanding achievement	Satisfaction level					Mean (SD)	Interpret
	Highest n (%)	High n (%)	Moderate n (%)	Low n (%)	Lowest n (%)		
Students correctly comprehended the problem of communication principles at the individual, organizational, and social levels.	30 (29.1)	54 (52.4)	18 (17.5)	1 (1.0)	-	4.10 (0.707)	High
Students were able to explain problems and obstacles that arise during communication under pressure.	29 (28.2)	55 (53.4)	18 (17.5)	1 (1.0)	-	4.08 (0.737)	High
Students' perceptions of communication problems in online learning versus traditional classroom learning.	45 (43.7)	55 (53.4)	3 (2.9)	-	-	4.41 (0.550)	Highest
Total average						4.19 (0.629)	High

From Table 6, problem understanding achievement was at a high level (\bar{x}) of 4.19 with a standard deviation (SD) of 0.629. With a mean (\bar{x}) of 4.41 and a standard deviation (SD) of 0.550, the study was able to examine in detail students' perceptions of communication problems in online learning versus traditional classroom learning. With a high mean (\bar{x}) of 4.10 and a standard deviation (SD) of 0.707, the students correctly comprehended the problem of communication principles at the individual, organizational, and social levels. With a high-level mean (\bar{x}) of 4.08 and a standard deviation (SD) value of 0.737, students were able to explain problems and obstacles that arise during communication under pressure.

Table 7 Development planning achievement

Details of development planning achievement	Satisfaction level					Mean (SD)	Interpret
	Highest n (%)	High n (%)	Moderate n (%)	Low n (%)	Lowest n (%)		
Students were able to plan effectively when solving communication problems.	28 (27.2)	52 (50.5)	22 (21.4)	1 (1.0)	-	4.04 (0.727)	High
Students were able to apply communication principles and elements to develop their own communication styles.	27 (26.2)	53 (51.5)	21 (20.4)	2 (1.9)	-	4.02 (0.741)	High
Students have a vision for their future communication potential.	31 (30.1)	59 (57.3)	13 (12.6)	-	-	4.17 (0.641)	High
Total average						4.07 (0.680)	High

From Table 7, development planning achievement, the mean (\bar{x}) was 4.07 and the standard deviation (SD) was 0.680. With a high-level mean (\bar{x}) of 4.17 and a standard deviation (SD) of 0.641, it is possible to conclude that students have a vision for their future communication potential. With a mean (\bar{x}) of 4.04 and a standard deviation (SD) of 0.727, students were able to plan effectively when solving communication problems. With a high-level mean (\bar{x}) of 4.02 and a standard deviation (SD) value of 0.741, students were able to apply communication principles and elements to develop their own communication style.

2.3 The correlation coefficient of 0.08, the predictive probability when all variables are added together from the sample variables with forecast accuracy or influence of 95 percent (R Square = 0.95), and the remaining 5 percent (R Square = 0.05) with the standard error of the dependent variable in the forecast being +0.13. Based on the results of the investigation, it was possible to formulate a forecasting equation demonstrating that just two variables affected the success of the Communication Principles course: communication training and Internet access. The space element for

teaching and digital literacy had little effect on the performance of fundamental topics in communication.

Table 8 Multiple Correlation Analysis of Factors Affecting Achievement of Principles of Communication Course for the Development of Flexible Online Lessons

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.603	.082		7.392	.000
Communication training	.607	.070	.691	8.723	.000
Internet access	.246	.066	.293	3.703	.000

R = 0.976, R2 = 0.952, SEest = +0.13, Constant 0.951

From Table 8, the 1 unit change in the training factor for communication results in a 0.61 unit change in the product of the equation. And a one-unit change in

the Internet access factor results in a 0.25-unit change in the product. Therefore, "communication training" had the greatest impact on the achievement of communication principles. Communication training must be prioritized if teaching and learning management are to be effective and efficient in accordance with the goals of MU Literacy.

However, communication training is a key guideline for understanding the problems during online teaching at university. It requires planning to improve an individual student appropriately through various methods from the application of various tools that contribute to the development of online lessons in the Principles of Communication course.

3. Suggestions for developing flexible online lessons

3.1 The importance of policy recommendations can be described as follows:

3.1.1 The university's policy formulation must be consistent with the existing reality, taking into account the distinctions between online and on-campus learning challenges, in order to establish a standard for hybrid-style teaching and learning. In other words, there

should be two forms of instruction in a single course, depending on the course's specifics and aims.

3.1.2 To encourage instructors to understand the significance of self-improvement, university rules must incorporate indicators of instructor-led online teaching standards or explicit evaluation criteria. This may involve training strategies such as arranging students according to their teachers' personalities, exchanging teaching methods, or discovering online teaching methods that can be shared.

3.1.3 University policies must be prepared to encourage and support the use of technology, resources, and media, such as high-speed internet, for online teaching management by incorporating a variety of teaching platforms and classroom-appropriate activities. Additionally, online teaching help centers must be developed in both the central and faculty regions in the case that a teacher need guidance on how to use the platform or encounters issues while online teaching.

3.2 Practical recommendations can be described in order of importance as follows:

3.2.1 The development of flexible online lessons for improving communication literacy requires focus on three areas:

3.2.1.1 Flexible coursework: This is made possible by permitting students to contribute their ideas to the development of a brand-new course. In other words, after opting to enroll in the Communication Core course, students may provide information, specifics, and activities for each session of the timetable that do not impact the Thai Qualifications Framework 3. (TQF 3).

3.2.1.2 Flexible time: In the hybrid model, this can be accomplished by having instructors and students collaboratively choose the ideal teaching time period without impacting the instructor's time structure or schedule.

3.2.1.3 Flexible Activities: This is achieved by having instructors plan educational activities based on student expectations and the availability of learning resources and equipment for students. If there are any barriers, they must work together to find a solution.

3.2.2 Promotion of communication training for both instructors and students. As the most influential aspect in the achievement of technical communication literacy, it is crucial to emphasize the method or form of communication that students will employ.

3.2.3 Beginning with the first hour of instruction, instructors and students interact, creating a learning environment with a non-pressurized, communicative style that encourages students to make individual judgments. In addition to describing the objectives, accomplishments, and assessment format to students at the beginning of each class period.

3.2.4 The planning and execution of everyday communication in the field of communication is the outcome of concrete, simple, and obvious teaching examples. It must incorporate communication ideas and elements, such as leadership and communication or change management.

3.2.5 The online teaching model has been modified mostly in response to student input, with some classes allowing students to learn independently using MUx and reducing their workload to allow for more time in the classroom. In addition, attention must be made on training approaches such as question discovery and skill practice.

Discussion

The research on the creation of adaptable online classes for the improvement of communication literacy can be discussed according to the following research objectives:

1. Problems and obstacles of online teaching

1.1 The difficulty produced by messengers, namely Mahidol University's online teaching and learning management in the context of the COVID-19 outbreak, reflects the alteration of teaching approaches in accordance with learning objectives. Consideration must be given to structuring activities that emphasize self-expression, grouping, and classroom engagement through online instruction, which results in less teacher-student interaction. This aligns with the ECLAC-UNESCO (2020) study on education in the era of COVID-19. In other words, adaptability in education has responded to the crisis by delaying face-to-face schooling and deploying a variety of distant learning platforms. This is a challenge for university teaching and learning management as it exists today.

Developing a learner's knowledge of learning is claimed to need less contact between teaching and learning. According to Hodgman, Sabatini, & Carminucci (2021), who analyzed the interactions between teachers, students, and families during COVID-19, the objective of the Communication Principles curriculum is to train students in communication skills.

The results demonstrated that classroom interactions are significant to the development of teacher-learner relationships at the core of learning outcomes, and that student interactions enable teachers to assess student motivation, engagement, and material comprehension. It is also compatible with research by Coman, Tiru, Mesesan-Schmitz, Stanciu, & Bularca (2020), which evaluated online teaching and learning in higher education from the student's perspective during the viral outbreak. The study indicated that the majority of problems during the crisis were technical in nature, followed by a lack of instructor expertise and an inflexible instructional approach.

However, online teaching and learning management initially caused teachers a great deal of concern because they lacked knowledge and experience in online teaching. This is consistent with a study of K-12 teachers' concerns conducted online by Farmer & West (2019). According to the study's findings, instructor concerns in an online context originate from varying instructional materials and experiences. Despite having many years of teaching expertise, teachers have job-related issues as well as concerns regarding students with constrained learning settings. However, because online tutoring is various, it is vital to familiarize oneself with each instructor in an acceptable manner, despite the fact that certain teachers are always eager to learn anything new. On the other side, there will be a group that refuses to adjust to changing conditions, which is consistent with the findings of Vergara-Rodriguez, Anton-Sancho, & Fernandez-Arias (2022), who studied the variables that influenced teachers' adaptation to digital learning environments during the COVID-19 epidemic. The study discovered that the COVID-19 pandemic has harmed teachers' stress levels, digital skills, and their capacity to adapt to digital surroundings.

The move from traditional teaching-learning to online teaching-learning is hampered, however, by the challenges caused by instant messengers. This is viewed as a response to the direction of learning through the application of digital technology to produce more diverse learning outcomes for students.

1.2 The preparation for the COVID-19 pandemic demonstrates that online learners are inadequately prepared. This is congruent with the findings of Tuntirojanawong (2013), who discovered that graduate students in e-learning were most prepared for digital access but lacked academic and technological abilities. If categorised according to personal background

variables, there is no difference, and institutions could improve and better prepare for technology-based learning that requires application.

During the first semester, students select courses based on the recommendations of their seniors or their own predictable interests. Choosing to study does not, however, indicate that students are unprepared. However, the instructor can notice this through practice sessions or other hourly activities. In accordance with the findings of Heemskerk & Malmberg (2020), it is essential to analyze student engagement using observational techniques. Especially during teaching exercises that demonstrate a predictable increase or drop in involvement between lessons. In comparison to teacher-led instruction, it fosters greater interpersonal participation. This is due to the fact that there are processes that require teacher support, reporting, and assessment of educational success.

The student-centered online education process also poses a challenge in that online student achievement assessments are frequently susceptible to severe corruption-related vulnerabilities. This is congruent with the findings of Hill, Mason, & Dunn (2021), who discovered that institutions were forced to use online teaching and evaluation due to the COVID-19 predicament. This modification does not introduce new issues, but it does raise the possibility of fraud.

However, teaching and learning management must emerge from both teachers' and students' preparation. Currently, student-centered instruction and pedagogical flexibility are highly beneficial in boosting learning results. In addition, it should provide students with the option to participate in the creation of the course or even to create their own schedule. In this regard, along with the findings of Khan, Egbue, Palkie, & Madden (2017), the mechanisms of learner participation are based on traditional instruction and augmented by modern technology. This includes a view of online course design that engages students and is a recommended practice. These instructors are aware of and prepared to modify their online teaching methods to deliver the most appropriate approach.

1.3 The issue with communication channels, namely online teaching management, necessitates a platform suited to the subject's method of instruction. For core communication courses with several activities, where the institution has prioritized the use of a single platform, it is challenging to meet course objectives and student needs. This is congruent with the research of

Gillett-Swan (2017), which explains that altering teaching techniques with a single platform or approach has resulted in a variety of barriers for students to fully participate in the course. Learners should be instructed in developing and implementing group online learning activities, as well as providing a suitable online environment for various sorts of practice.

From the same perspective, online teaching channels continue to have constraints in the exchange of learning and individual learner assessments that are not practicable or difficult owing to technology limits and insufficient tooling abilities to use the platform. This contradicts the findings of Rawashdeh, Mohammed, Arab, Alara, & Al-Rawashdeh (2021), who studied complex, yet adaptable and accessible learning systems using a number of methodologies. More than 80 percent of students believe that e-learning can enhance communication between students and between learners and teachers. As difficulties are unforeseen and might arise at any time, Internet access is important for online teaching and learning in order to ensure effective instruction and constant communication. This, consistent with studies by Clarin & Baluyos (2022), illustrates how teachers encounter a number of obstacles in online teaching in terms of motivating students, structuring learning resources, and inadequate internet connection. Including constant communication with students and parents, teachers may incorporate activities that maintain students' interest throughout the class. Including constant communication with students and parents, teachers may incorporate activities that maintain students' interest throughout the class. Internet connectivity issues also impede teaching and learning activities.

In addition, the university should provide equipment, tools, and high-speed internet to enable these solutions. This comprises the incorporation of numerous teaching and learning management channels in order to create effective and efficient educational outcomes. In this regard, consistent with the findings of Basar, Mansor, Jamaludin, & Alias (2021), the outbreak of COVID-19 has necessitated the use of online learning, hence posing obstacles in many sectors of education. To ensure successful learning, however, it is essential to provide both a well-equipped gadget and a solid internet connection.

The problem of communication channels can be resolved, but universities, parents, professors, and students must work together to understand the significance of online teaching and learning. This is an

opportunity to discover new approaches, innovate, and find a strategy for managing online teaching that is fit for the Communication Principles course's activities in order to maximize the learning outcomes of the students.

2. Factors Influencing the Acquiring of Communication Literacy

2.1 The communicative training component was the most significant and first factor in the study's communicative literacy achievement based on MU Literacy. The level of the element with the highest average, when analyzed in depth, was that students valued communication training that can be customized to their personal communication. This is consistent with research by Simmenroth, Weiss, Fischer, & Himmel (2012), which indicates that communication can be learned, but the learning process must be rigorous, and should include a communication course for enhancing communication skills, particularly for female students in both technical and emotional aspects of communication. However, when students enter a training program or study according to the curriculum, they demonstrate a distinct change in communication.

The aforementioned factors highlight the need for communication training, and it goes without saying that students understand the significance of these difficulties. It was discovered that the second level of influencing factor was the students' decision to enroll in the main communication course based on the knowledge they obtained from taking the course. This is consistent with Rathee & Rajain's (2018) explanation that communication is essential for everyone. Effective communication skills not only help to communicate ideas with others, but also develop positive connections between them, so when selecting a communication course, the benefits of group activities such as group discussions, role playing, etc. should be considered. Students will be able to develop their communication skills to excel in job interviews, meetings, public speaking, and other industries.

In addition, the issue of training components for communication in the sphere of student interests stems from an organizational culture that fosters learning and decision-making that leads to educational success. Consistent with Warter (2019) research, it is interestingly indicated that student organizational culture is dependent on environmental changes that influence knowledge of tertiary issues such as enrollment culture. This demonstrates the close relationship between corporate culture and the standard of public higher

education. Therefore, communication training is the most critical aspect in accomplishing the flexible learning attainment objective. The training procedure must be modified immediately to accommodate and match the demands of students.

2.2 According to the MU Literacy approach, Internet access was deemed the second factor affecting the achievement of communication literacy, after communication training. Upon closer inspection, it was discovered that during the course of instruction, students witnessed the university's improvements to the Internet platform to make it suitable for online learning. In accordance with Cacheiro's research, Medina, Dominguez, & Medina (2019) have focused on the development and improvement of digital repositories to make them more dependable, user-friendly, and situationally appropriate for learning. The curriculum will also need to be updated via discussions, advice exchange, and the significance of a new online learning culture.

Due to the current state of affairs, universities must continually adapt, but university Internet access is also crucial. This is due to the fact that the quality of the Internet is an indicator of the success of online education. In this regard, consistent with Zhou's research, Xia, Yin, Zhang, & Feng (2016) noted that the Internet has become an inseparable component of the university, which has become an essential platform for students. Learn, amuse, and establish social connections. Combined with the fact that 95 percent of students use the Internet for more than two hours per day, this demonstrates that the Internet affects course performance and can facilitate high-quality postsecondary education.

In addition to the adaptation of the university and the quality of the Internet, the COVID-19 situation also raises the question of the flexibility with which students can use the Internet both on and off campus. On this point, contrary to research by A. Bashir, Bashir, Rana, Lambert, & Vernallis (2021), the challenges and disruptions of the education sector's transition to the online format are described. Without students having technical issues and an internet connection, the disadvantage for low-income families is enormous, and online education has revealed the conflicting needs of internet access. It has been suggested that hybrid courses be organized in order to facilitate the university, promote student flexibility, and create digital equity. The student Internet access factor reflects the competence and potential of the university's internal staff involved in the management of online instruction to ensure an

appropriate admissions strategy for all students. It is hoped that this will occur as teachers and students become more accessible for online learning, and that these processes will lead to the maximum learning for students.

2.3 It was determined that the teaching space factor did not influence the achievement of MU Literacy, but the opinion level remained the highest. Students can use other technologies in conjunction with the learning platform to enhance learning efficiency if they examine them in depth. In this regard, consistent with research by Bryan, Lutte, Lee, O'Neil, Maher, & Hoflund (2018), online university instruction is prevalent today, with technology playing a significant role in the interaction between students and instructors. When interacting with peers of the same level, students are more likely to participate actively in class, while the use of a variety of technologies contributes to effective learning in an online environment.

Although technology plays a significant role in shaping online teaching interactions, one thing is always open to the exchange of ideas or concepts. Soon & Fraser (2011) found that online exchange and knowledge sharing among students are the result of technological tools that support knowledge sharing and knowledge exchange activities, which rely heavily on the teachers' learning management systems (LMS).

The majority of the time, students study online through a platform established by their professors or the university, which does not demonstrate the use of technology. Students were able to learn and develop their potential at a high level during online learning, according to this study. In this regard, consistent with research by Shi (2020), the results of the study indicate that an increasing number of students are now entering an online learning environment with unique characteristics, diverse student learning behaviors, and diverse instructor teaching styles. The student's ability to self-learn, the teacher's ICT skills, and the hardware all influence the learning needs of students. Consequently, the teaching space factor is the primary factor for online instruction only.

2.4 It was determined that the digital literacy factor did not influence the achievement of MU Literacy, but the opinion level remained the highest. When examined in depth, it is discovered that students can utilize the digital knowledge they have acquired for group work or group activities. According to Kumi-Yeboah, Sallar, Kiramba, & Kim (2020), digital technologies, multimedia presentations, and online tools facilitate

online learning for students. In an online context, students can participate in building knowledge in order to achieve greater academic success.

Students must be able to apply their digital knowledge to something new or demonstrate their creativity in order for online learning to be successful. In this regard, according to research by Riordan (2013), emerging technologies from platforms are crucial for generating new information and innovation. The knowledge-building process drives innovation, identifies education gaps, and demonstrates technology-application strategies for organizational success. In this instance, the basis for creating and presenting something new is the application of digital technology knowledge to the creative designs of various students.

Due to the diversity created by students, this can be a crucial point of incubation for students' understanding of the digital transformation, which involves recognizing the importance of dynamic technology. In this regard, consistent with research by Carstens, Mallon, Bataineh, & Al-Bataineh (2021) have described in an interesting manner how the evolution of technology has led to an increase in student learning; however, despite the fact that technology is useful for learning, there is still an excessive reliance on it. It is essential to provide training for educators and students who need to implement technology, as well as to establish a continuous participation process. This is to lessen the impact of technology's limitations on the learning environment. Therefore, teachers and students should have digital literacy as a foundation for expanding their knowledge in the current environment.

Conclusion and suggestions

This research investigates the challenges and difficulties of online learning in the SHSS 144 Principles of Communication course at Mahidol University's Faculty of Social Sciences and Humanities. Primarily through the WebEX system, the objective is to assist students to comprehend the ideas and parts of communication so that they can be used effectively. This results in restrictions on the interchange of learning and individual student evaluations, as well as online learning that requires constant internet access and is occasionally prone to errors. Concerns remain in the case of teachers, as knowledge is required more than the content of the instruction and more preparation for teaching is necessary, but the interaction between students has diminished and must be constantly corrected.

Furthermore, it was shown that only a tiny number of pupils lacked the necessary equipment for online learning. The decision to enroll in each subject is influenced by advise from seniors, which raises expectations for academic accomplishment. However, students find that online examinations are more susceptible to fraud and fraud can occur more quickly. This has increased the necessity for teachers to employ a variety of assessment strategies.

In accordance with the quantitative findings, the communication training factor predicted the most successful communicative literacy outcomes, with the perceptions of the advantages of training being the most influential variable. The decision is then made to study the essence of communication, which can be influenced by the learner's personal interests, course material, and company culture. In addition, Internet access influences the attainment of communication literacy, with an emphasis on the modernization and adaptation of the platform to fit the demands of the students. The teaching space factor and the digital literacy component have no bearing on the accomplishment of communicative literacy because they are prerequisites for all students. In order to have the advantage of employing it for planning, development, and application in a range of scenarios, it is also required to continue learning.

The recommendations for the development of adaptive online lessons to increase policy communication literacy need institutions to evaluate the variations between online and on-site learning challenges. This is to set standards for learning in the hybrid style as the primary objective and must specify the indications in the teachers' online teaching standards in depth. It also encourages educators to recognize the significance of growing their own personnel by providing equipment and tool assistance. In addition, for online learning to be flexible in practice, it is essential to emphasize flexible courses, schedules, and activities, particularly communication training. In addition, it facilitates interactions between teachers and students by providing examples and real-world applications, as well as modifying online teaching approaches based on student response. This is done to build a learning center that meets the needs of the students.

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