

Teaching and Learning through Using of Online Applications during the Covid Situation 2019, Roi Et Rajabhat University, Thailand

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ABSTRACT

The situation of the coronavirus outbreak 2019, which is going to be very damaging to humanity. The epidemic situation greatly affects people's lifestyles, and every lifestyle of a person needs to be adapted to dynamically changing situations. In college leaks, just as adaptations are needed, especially in teaching and learning, teachers and students need to adjust themselves to remain polite first. Therefore, the purpose of this research is to 1) survey the conditions of learning and teaching through the use of online applications during COVID 2019. 2) study teaching and learning problems through the use of online applications. And 3) offer guidance on teaching and learning development through the use of an online application. The sample consisted of 82 students in Public Administration: Obtained by specific sampling method. The instrument used for data collection were opinion polls and interviews. Analyze data with basic statistics and analyze results by content.

Research results 1) devices used for learning through the use of online applications, including mobile phones, desktop computers, and tablets, which the purpose of using the Internet to find information about studying, watching movies, listening to music. The places used to study online are home, dormitory. Learning styles are favorite Lecture classes and Blended learning. The priorities of the students are as follows: want to choose a normal teaching method, the suitability of the study environment, students are satisfied with their classroom studies, studying in the classroom allows you to concentrate on your studies, and to express your opinions more. 2) Problems of teaching and learning through the use of online applications during COVID 2019 were found to have 8 problems: (1) There is a hassle to log in online, (2) the lack of concentration as in the classroom, (3) Internet network is unstable, (4) Lack of interaction between teachers and students and restrictions on exchanging learning, (5) Some course information is not conducive to online learning, (6) The teacher gave orders to increase, (7) Obstacles to search for files and documents used in each course, and (8) the environment is not conducive to learning.

3) Guidelines for teaching and learning development through the use of online applications during COVID 2019 found that there are 5 guidelines: (1) content development, (2) teaching materials development, (3) application Use technology, (4) to develop new teaching models and (5) awareness of learners.

Keywords: Online Teaching, Online Application, Covid Situation

INTRODUCTION

The COVID-19 epidemic has severely affected education at all levels around the world, forcing almost all schools around the world to shut down. Data from UNESCO (World Economic Forum, (2020) found that 1.38 billion students were affected by the school closure, which was a continuous and widespread change to the education system. Most notably, the teaching that has to be continued without interruption will affect the quality of the students. That is to say, the quality of the population in the future, the teaching has been adjusted in many ways, creating innovative ideas, and new forms of teaching from students who cannot come to school but can study. The concept of distance learning using online media, therefore, mobilizes to help solve the problems of teaching and learning, creating a new type of educational management system that educational institutions at all levels have to adapt to the current situation and must prepare for the future (Tauean Thongkaew. 2020: 1) In addition, the coronavirus outbreak is affecting the education system, directly and indirectly, that is, the way of life of students used to sit in class and interact directly with their teachers used to do activities together with friends, turned to a new way of life to maintain social distance, to have online teaching and learning systems, to abstain from group activities, etc. However, even when it comes to online teaching, the intensity of the content and the content of the instructor can pass the knowledge to

learners with the same quality as classroom learning.

However, the situation of the coronavirus outbreak in 2019 requires all organizations to adjust themselves during the dire situation. The educational institutions at all levels have adjusted the teaching and learning process to suit the situation. There is research done to study the adaptation methods of educational institutes at all levels such as Kannikar Sansupa, Ueathip Kongkranphan, Umaporn Sucaromana, and Phakawan Nantasen (2020) found that the adjustment of an undergraduate student overall was high level. There was no significant difference between male and female students for the adjustment in overall and each aspect and there was a significant difference between the level of students. Phra Anusorn Kittiwanno, Phramaha Sittichai Jayasitdi and Aphicha Sukjeen (2020) found and said that in late 2019, COVID – 19 was already spreading in Thailand. This new infectious disease outbreak affected globally people's lives. So, they have to adapt themselves to the New Normal society, in which they live differently from the past under social changes. Additionally, this outbreak has affected the whole social structure such as economics and especially, education, in which the strategies and plans have to be created by the Ministry of Education to facilitate learning systems in this crisis. While there are different various questions from societies relating to the stability of the technological system, teacher's readiness, as well as the efficiency of created plans and strategies towards students' learning achievement. The majority of them consider the new learning method an increase of family expense such as the Internet, desktop, or even smartphone. Since kinds of new technologies provide both advantages and disadvantages to humans, students and teachers have to consider them. Therefore, during global emergencies, parents should control their children when they are attending online classes. Applying Buddhist teachings in educational enhancement is considered an important factor in improving learners' sustainable problem-solving skills as well as the ability to understand and learn well. Therefore, the situations of COVID-19 outbreak with online instruction and learning in the web programming course. The spreading of COVID-19 considerably affected the educational system. Both learners and teachers have to adapt the teaching and learning from the classroom to online learning, which is composed of both advantages and limitations. Availability of computer equipment of the students, including the stability of the internet signal of both teachers and learners, there may be problems during the course. In the web programming course, the lecturer and students have discussed and adjusted an instructional and learning process in the online platform instead of by using main online learning applications such as Line, Zoom, YouTube, and Google Classroom. Meanwhile, Camtasia Studio Program was employed by the lecturer to edit video clips in support of the instruction, and Team Viewer Program was applied to access the computer of the learners when they had problems related to the programming and disruption during class. Although the learner and the lecturer stayed in different places, online learning in the web programming course had no relative obstacles during the course. Moreover, edited video clips could be provided and published on YouTube so that the students could access to learn anytime. From the results, the lecturer realized that the online learning process could solve educational issues during the COVID-19 outbreak and it was suitable for computer-based courses as well (Siriporn Inthason. 2020). In the same way of the study of Saisamorn Chaleoykitti, Jintana Artsanthia and Magdalena Supaporn Daodee (2020) found that COVID-19 is a severe disease outbreak. From pandemic has spread across continents or the entire world. The educational institutes follow the standard of the ministry of public health to prevent this disease. One thing in protection is social distancing method or increase the social distancing for protection the herd of people to safe from infection. This method is to prevent infection that leads to bringing the students to study in the online system with many applications. Thus, the method of study and preparation in teaching by working from home have the objectives for continuing the teaching and learning process within the crisis of this COVID-19 disease. This article has the objective to propose the effect of COVID-19 pandemic disease to manage in the nursing study, vocabulary related with COVID-19 disease, and transformative learning in the educational system to the new normal way of this crisis.

Faculty of Political Science, Roi Et Rajabhat University, Thailand which provides teaching and learning in public administration and integrated administration. The faculty has prepared and adapted to accommodate these changes by preparing the subject matter to be taught, teaching material, information technology, and a new teaching model to enable students to learn and access knowledge with ease and efficiency in the event of the COVID-19 pandemic. Moreover, the government's policy on organizing a new type of education system has resulted in educational institutions of all levels

adapting to the current situation and preparing for the future.

Roi Et Rajabhat University has therefore issued an announcement about "Surveillance Measures for Coronavirus 2019 (COVID-19) (No. 9)" as a guideline for faculty, staff, and students as follows: 1) Faculty and personnel with a history of traveling from the situation area designated as the highest control area according to the order of the Coronavirus Disease Situation Management Center 2019 (COVID - 19) 1/2021, dated January 3, 2021, to notify the supervisor. Students are requested to inform their advisors and their advisor of the Dean's report, respectively, to attend 14-day quarantine at residence and assess the risk of COVID-19 infection. 2) Let the faculty manage online teaching from now until 31 January 2021, unless a full-time teacher needs to teach by other means, or will request permission from the dean of the affiliation as a grantor on a case-by-case basis. And 3) The faculty members shall perform their duties by taking Work from home measures as appropriate to reduce travel and reduce exposure to infection by requiring the Dean to supervise the performance of duties according to the situation so as not to cause any damage to the government.

Therefore, given the impact of the COVID-19 outbreak and the government policy, and the announcement of the Roi Et Rajabhat University. Therefore, the research team is interested in studying the teaching and learning conditions through the use of online applications during the COVID 2019 situation, to guide the improvement and development of online teaching and learning models to be more efficient and effective now and in the future.

RESEARCH OBJECTIVES

This research aimed to explore teaching and learning through the use of online applications during COVID 2019, to analyze teaching and learning problems through the use of online applications during COVID 2019, and to provide guidance on teaching and learning development through using of online applications during COVID 2019.

RESEARCH METHODOLOGY

1. The sample were students of the Faculty of Law Roi-Et Rajabhat University, 82 students, and lecturers who are responsible for teaching and teaching 10 people; they were obtained from specific randomization (Academic and Processing Office, 2020).

2. Research tools for data collection:

1.1A questionnaire is a research tool divided into 4 parts: (1) Section 1 is a general information question, (2) Part 2 is a question about teaching and learning conditions through the use of online applications during COVID. 2019 is an approximation scale (Rating - Scale), (3) Section 3 is a question about teaching and learning problems through the use of online applications during COVID 2019, and (4) Part 4: Recommendations for the development of teaching and learning through the use of online teaching and learning applications during COVID 2019.

1.2.The interviewing to conduct interviews with representatives of teachers and student representatives of 10 people.

3. Data collection: (1) Researchers conducted an online questionnaire using the Google form program to collect data because it was a data collection during the COVID-2019 situation, (2) data collection of respondents by Online questionnaires were distributed to students by Line group and Facebook group during 10 January 2021 - 10 February 2021, (3) The results of the online questionnaires obtained were examined for validation. Complete of the answer Obtain an accurate and complete set of data that can be used for further analysis, (4) conducting telephone interviews and online discussions.

4. Data analysis: (1) The general data of the respondents were analyzed by descriptive statistics, (2) opinion about teaching and learning through the use of online applications during COVID 2019 was analyzed using descriptive statistics, (3) Opinions, suggestions, and instructional development guidelines through the use of online applications during COVID 2019, analyzed quality data by using content analysis and Triangulation technique.

Then, after having the information from both the quantitative and qualitative data, these will be built as the guidelines for the development of learning management to suit the situation by using the concept of Building Tactical Strategy from Research Base which divided into 4 processes: (1) research design, (2) creating research-based strategies, (3) experimental research or strategy implementation, and (4) research monitoring and evaluation. According to the tactical strategies mentioned, the purpose is to design the processes of

research corresponding with strategic management processes for achieving effective development approaches (Sanya Kenaphoom. 2020)

RESULTS

1.General information of respondents: found that the majority of the students who answered the question were female (63.4%), having previous learning experience using an online application (90.2%), had 52.4 percent of experience in taking an online application. The device used for learning through the use of online applications is mobile (78.0%), followed by computer usage (15.9%), and tablets (6.1%). Objectives of using the Internet to find information about learning (% 58.5), followed by watching movies (52.4%), listening to music (51.2%), others (reading e-books, reading novels, reading news, studying and shopping online) (48.7%). chat (41.4%), and play games (15.8%). The place to study through the use of online applications was home (69.5%), dormitory (54.8%), Coffee Shop (2.4%), restaurants (1.2%). The favorite learning styles were Lecture class (51.2%), Blended learning (24.4%), Online live session (14.6%), and Online recorded session (9.8%).

2Teaching and learning through the use of online applications during COVID 2019: found that if possible, students would like to study normally (40.2%), suitability of the learning environment (58.5 %), satisfied with their learning in the classroom (57.3 %), gain knowledge and understanding of learning through the use of the Zoom application and learning happiness through the use of the Zoom cloud application (53.7%), understand the content of learning through the use of the Zoom cloud application (50.0%), satisfied with learning using the Zoom app. cloud from home (48.8%), learn better content and suitability of the learning applications (47.6%), more interacting with the instructor, more relaxed in learning and motivated to learn (45.1%), interact more with friends (41.5%), convenient (40.2%), have more concentration on their studies (46.3%), dare to express more opinions (45.1%), are more enthusiastic about their studies (43.9%), feeling dull (39.0%), feeling a waste of time (37.8%), and if possible, students want to choose to study online (35.4%).

3.The teaching and learning problems through the use of online applications during COVID 2019 found that there are 8 aspects: (1) Login Zoom is a hassle, (2) the lack of concentration as in the classroom, (3) Internet network is unstable, (4) Lack of interaction between teachers and students and limitations on exchange of knowledge, (5) Some course information is not conducive to online learning, (6) The teacher gave orders to increase,(7) Obstacles to search for files and documents used in each course, and (8) the environment is not conducive to learning.

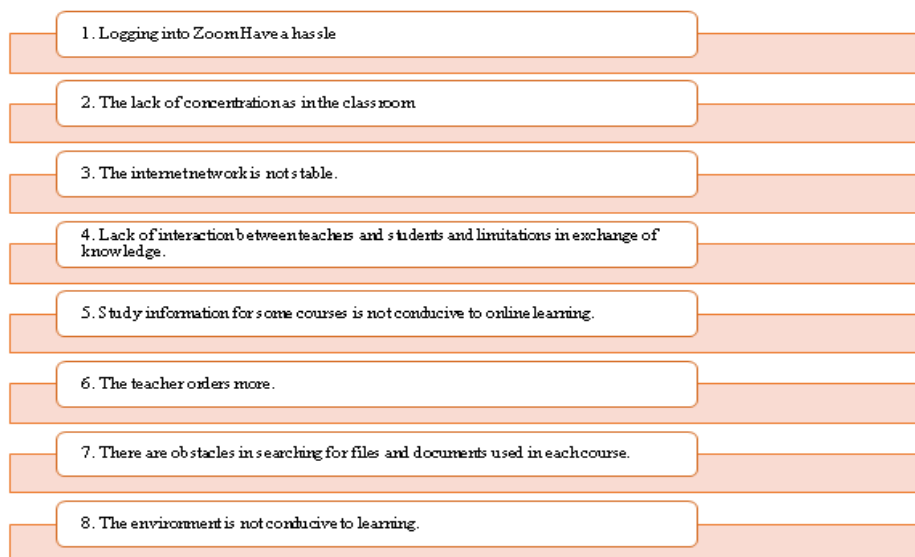


Figure 1:The teaching and learning problems through the use of online applications during COVID 2019

4.Guidelines for the development of teaching and learning through the use of online applications during COVID 2019: it was found that there were recommendations and guidelines for the development of online teaching and learning in e-learning format and found that there were 5 guidelines as follows:

4.1 Continuous Content Development:

-Teachers should prepare appropriate teaching content each week by considering and adhering to the study plan as outlined in the learning management plan, as well as flexible study content adaptation under the circumstances of COVID 19.

-Lesson content including text, images, audio, video, and other multimedia will be sent to learners through, using the online application during COVID 2019. Students, tutors, and classmates can all communicate, discuss, and exchange ideas with each other just like normal classroom lessons, and relies on modern communication tools such as e-mail, web-board, chat, Social Network. Therefore, online learning is for everyone, study anytime and anywhere.

4.2 Development Of Teaching Materials:

-Each course of study offered in each semester, each instructor has prepared teaching materials and given to students to use for their studies, so students have to prepare to read the teaching materials in advance or read and review the issues that the teacher described and do not understand.

4.3 Application Of Technology

-The instructor and the student must prepare both a phone, a laptop, an iPad, and a connection to an internet contract in advance.

-Teaching and learning through the use of online applications during COVID 2019 is a distance learning system in which the teacher and the student are in a context that is far apart by location, distance, and time. Therefore, learners must have self-study through content and learning materials, using technology in the internet, information transmission, and communication system as an essential tool, if technology is disrupted, it will make learning very difficult.

4.4 Development Of New Teaching Styles

-The instructor and the student are required to enter into a new understanding of the study style, and an assessment of academic achievement, possibly using an online exam format, online submission for flexibility and efficient adaptation to changes.

- The design is defined in various areas, the curriculum analysis, determines the expected learning outcome or learning objectives, defines the content, defines the measurement and evaluation activities of learning.

4.5 Learners Awareness

-Students will need to plan their studies and adjust to acceptance of unusual situations, with online study materials ready.

-Students will need to be ready to learn via networking with some knowledge, basic computer competencies about Internet browsing, use of computers for content, information, presentations, and communications.

Guidelines for the development of teaching and learning through the use of online applications during COVID 2019 can be summarized as a model as shown in the figure below.

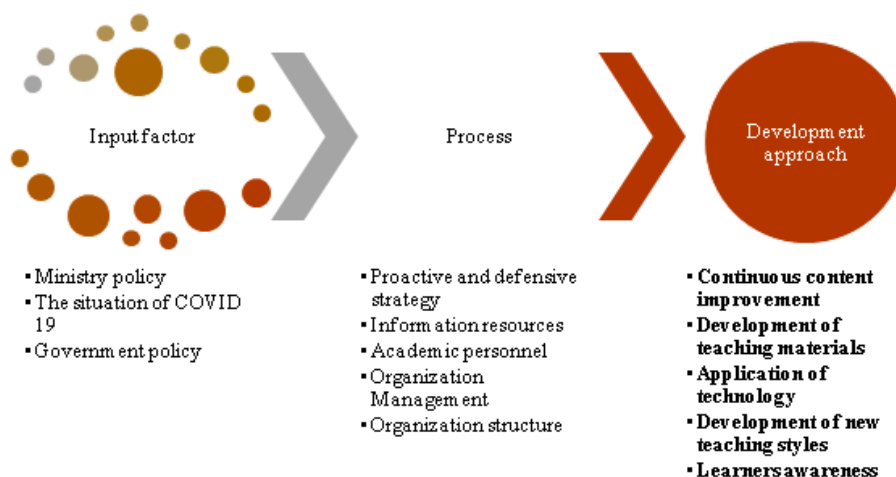


Figure 2: Guidelines for the development of teaching and learning through the use of online applications.

DISCUSSION

This research found the following points to be discussed.

1. The general status of the respondents It was found that students had experience studying exams through the use of an online application. The devices used for learning through the use of online applications were mobile phones, computers, and tablets. The purpose of using the Internet to search for information about learning, watching movies, listening to music, etc. such as reading e-books, reading novels, reading news, learning, shopping online, and playing games. The places to study using online applications are homes, halls, cafes, and restaurants. Favorite learning styles are Lecture class, Blended learning, online live session, and Online recorded session which the study results were consistent with the research of Sathian Phunpon and Patipol Annopboriboon (2020) found that most of the students are female, all have internet access, most have studied and have taken the online test, the devices used for studying and taking online exams are computers, tablets, and mobile phones. Most of them use the Internet to search for study-related information, chat online and use their homes and dormitories as online study places, the students' favorite forms of study are classroom learning, and online clip-on learning.

2. Teaching and learning through the use of online applications during COVID 2019 found that students would like to choose a normal course, followed by students quite agree on the suitability of the learning environment, More satisfaction with learning in the classroom, and more concentration on learning, and are more enthusiastic about learning, which the study results are consistent with the research of Sathian Phunpon and Patipol Annopboriboon(2020) found that the vast majority of students are less likely to agree that online learning leads to less interaction with their peers, and most of the students prefer the way they study in the classroom because the right location allows them to concentrate on their studies, and having a classmate in class is a great motivation for studying.

3. Teaching and learning problems through the use of online applications during COVID 2019: Logging in to Zoom is difficult, lack of concentration like studying in the classroom, unstable internet network, lack of interaction between teachers and students, there are limitations in exchange of learning, some courses are less conducive to online learning, teachers are more assignments, and there are obstacles to finding the documents used for each course. In addition, it was found that the Internet connection in the system Zoom application has to cost extra. The study results were consistent with the research of Sunate Surbkar (2009) Found that the problems and obstacles of teaching and learning through Moodle in the system/management are computers without internet to make it impossible to follow news or activities assigned by the teacher after study, the internet system crashes, maybe unable to enter, perhaps the internet dropped when doing the test, causing not getting the score, and consistent with the research of Sathian Phunpon and Patipol Annopboriboon (2020) found that the obstacles arising in online teaching were internet problems, lack of concentration in learning, unsuitable environment for learning, resulting in less enthusiasm for learning, the teaching clips have more time to study than the time in the class schedule and the materials in the classroom are not ready, the students are not able to follow up, and the teachers do not record the clips taught online. And as the same way of Boontip Siritarungsri (2020) found that in the climate of the Coronavirus pandemic throughout the world including Thailand, digital and educational technologies have become an increasingly important part of students' lives. Online teaching and learning have been arranged to continue the mission of the institutes of all educational institutions at the same time, various online programs have been developed to support online teaching as virtual classroom teaching by communication technology business. However, tools in particular online programs are considered applicable comparing to the limitation in classroom teaching. For this reason, teachers are required to improve instructional skills through the usage of technology to maximize educational benefits while achieving the learning outcomes of the institutions. The Technological Pedagogical Content Knowledge (TPACK) framework is therefore proposed in terms of applying learning design, whereas using the Professional Standards Framework for teaching and supporting learning in higher education in teaching towards the professional online instructors to be recognized at the international level.

4. Guidelines for the development of teaching and learning through the use of online applications during COVID 2019: It was found that the guidelines for developing online teaching and learning in 5 factors are: (1) Continuous content development, (2) Development of teaching materials (3) Application of technology (4) Development of new teaching styles, and (5) Learner's awareness. This is a recommendation for teaching and learning development to be able to adjust the appropriate

format, allowing teachers and students to jointly plan to design teaching and learning with quality. Consistent with the research of Mathasit Tanyarattanasrisakul et al (2020: 30) From the evaluation of the distance learning management in the situation of the COVID-19 epidemic, it was found that the development guidelines are as follows: (1) It should be developed so that distance learning management can create more interactions between teachers and students. (2) Additional means of communication and public relations for jobs or activities related to the university entrance examination should be added. And 3) Should choose to present content appropriate for secondary school students, however, experimental distance learning management still has the strength to promote students' technology competency. As the same line of Thanin Intharawiset et al (2019) found that the effectiveness of digital technology with people in the society having to adapt to the digital environment. Which reflects current learning methods that were influenced by digital technology. Teaching and learning have created the boundaries from the classroom to learn in the real context through communication channels, computer networks, and the online world. That is an important driving force in creating important motivation for learning. In the education sector view, Digital technology has caused a lot of changes in the learning behavior of learners. It's can be a tool for expanding educational opportunities, promote lifelong learning for people of all ages and all professions. Even though digital technology changes the way of learning, makes the job easy, and adjusts the learning process to benefit students. But digital technology still cannot replace teachers soon. Therefore, the study of changes in various aspects results of digital technology toward effective on characteristics of learners, teaching method and instructional model that have changed in modern times and the future, it is very necessary. To be aware of the ways to change the method Teaching styles, include the adaptation of teachers to be appropriate according to the learner's learning style and to understand innovations. The teacher himself is necessary to be aware of moral and ethical teaching. And create skills for learners to have life skills that can be applied to life, survive in the digital age itself.

Synthesizing the development of teaching and learning through the use of an online application consisting of 5 factors: 1) Improve the subject matter 2) Development of teaching materials 3) Application of technology 4) Development of new teaching styles, and 5) Learner's awareness. Designing participatory teaching and learning management to allow students and teachers to independently set guidelines and design the study content of their interest, along with a more alternative approach for assessing academic achievement.

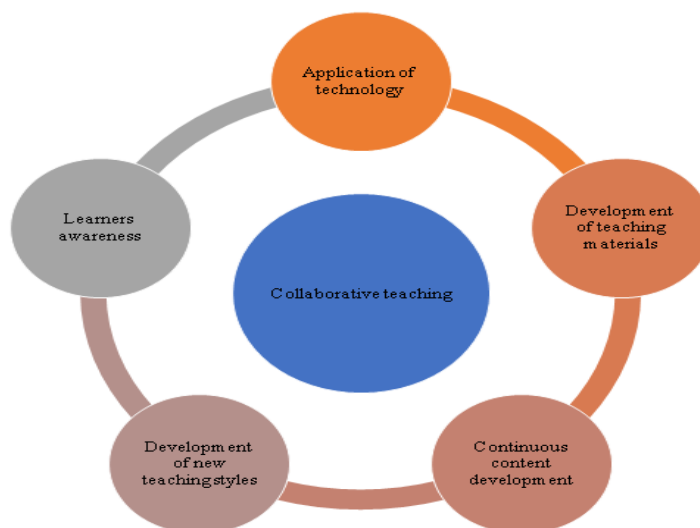


Figure 3: Guidelines for teaching and learning development

RECOMMENDATIONS

1. Policy recommendations: (1) the universities should prepare teaching materials to be ready for use, such as computers, notebooks, telephones, iPads, internet contracts, and online applications. (2) Universities should provide a place and increase the number of classrooms to support online learning for teachers and learners. (3) Teachers should have teaching techniques and psychology to attract learners' attention to the content they are teaching online, such as scoring and talking motivation.

2. Suggestions for further research: Compound research should be conducted and expanded the scope of research samples to cover all courses at the faculty and university level. This will enable the

results of the research to be applied to formulate teaching and learning strategies of the university effectively and to keep up with changing situations in the future.

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