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Student Evaluation of Factors Affecting Online Teaching Quality During the Covid-19 pandemic in Thailand: a case study of RSU

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Abstract

Due to the outbreak of COVID-19, Rangsit University in Thailand has switched from face-to-face teaching to online teaching, which poses a challenge to students who are used to traditional classroom learning. Therefore, it is necessary to objectively evaluate the students' views on the online teaching quality of epidemic situation in the International College of Rangsit University. In order to collect data to solve research problems, a questionnaire containing 29 questions was designed, and the data was analyzed by SPSS. According to the research, we can find that learning attitude, attention, platform, equipment and other factors will affect the quality of online learning, and when students have poor learning attitude and attention, poor teaching platform and equipment, it will affect the quality and efficiency of teaching and learning. Therefore, school teachers and students themselves must make some efforts to further improve the quality and efficiency of online teaching. This paper analyzes and discusses the problems existing in network teaching, and puts forward corresponding solutions.

Keywords: *Online teaching, Evaluation of teaching quality, Covid-19 pandemic*

1. Introduction

On February 11, 2020, the Director-General of the World Health Organization (WHO), Mr. Tan Desai, announced in Geneva, Switzerland, that the new coronavirus-infected pneumonia had been named "COVID-19" (Adnan & Anwar, 2020). Because the Covid-19 pandemic is spread by respiratory droplets, when infected and non-infected people gather in the same place the non-infected people are extremely vulnerable to infection. This is why people could not gather in the same place, leading to a significant change in teaching methods. As the Covid-19 pandemic began to spread in Thailand in early 2020, traditional learning or in-person teaching was deemed highly likely to accelerate the spread of the Covid-19 pandemic and cause the mass infection of people. Consequently, the only way forward for educational institutions to avoid transmission was to switch from traditional learning to online teaching. Therefore, during initial periods of uncertainty around the Covid-19 pandemic, universities in Thailand started experimenting with video chat and Internet-connected communication for learning, such as using Google Classroom, Microsoft Teams, Zoom, and similar packages (Bernard & Samuel, 2021). By doing this, universities were beginning their transition to the new normal education of the future and wanted the quality of online teaching to be as effective as offline teaching used to be (World Economic Forum, n.d.). The use of technology is a very important part of the equation for online learning. Among the many online teaching platforms available, teachers needed to go through the features, strengths, and weaknesses of the platform software to find the most appropriate platform for teaching their relevant course. Teachers needed to get accustomed to using the devices they are given to solve teaching tasks and problems efficiently and effectively. They had to balance traditional teaching with dealing with a lot of technical issues in a way that ensured the quality of online teaching. Students also had to deal with the possibility of not being able to connect to the digital classroom from time to time. Whereas in the past students needed to make sure they were physically present in class to take notes, they then needed to be prepared to also learn the equipment/software required for online teaching.

The Covid-19 pandemic situation in Thailand subsided in 2022 allowing the Thai government to order the opening of the country to resume tourism. Despite this, to protect the health of teachers and students from the effects of the Covid-19 pandemic, many universities in Thailand continued their use of online teaching, and although some universities offered in-person teaching courses, they had not completely stopped teaching online,



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but more often adopted a combination of in-person and online teaching methods with increased flexibility overall. This novel mode of teaching is also very attractive to students. But on the contrary, it is widely believed that the quality of online teaching is far inferior to in-person teaching. Traditional teaching is in-person and provides direct interaction with students, whereas in online teaching, teachers can't make rounds in the classroom, can't visually observe the learning status of students, or a potential lack of effective communication between teachers and students. Without teachers' on-site guidance and supervision, students' learning attitudes cannot be managed, especially those who lack self-discipline and have a relatively poor foundation, and are prone to lack of concentration. In addition, the interaction between students and teachers in online teaching is inferior to in-person teaching, and students cannot directly provide feedback to teachers if they have any problems. Therefore, feedback after class will lose its effectiveness, which naturally cannot guarantee teaching quality. For this reason, it is hoped that through this research it will be possible to propose improvement measures to improve the quality of online teaching and make it more effective in future applications. Students' evaluation of the quality of online teaching is influenced not only by their attitudes and concentration but also by the online education platform and the devices they use. Online teaching and learning require different online teaching platforms to deliver classroom knowledge and receive appropriate feedback on student work. With rapidly evolving technology, the pace of software development is also increasing, which requires students to be constantly aware of how to use the platform and how to update its features. In addition, not all students were proficient in web technologies and platforms, and for these students, web-based instruction created an overload of learning. Long-term online instruction also required students to have devices such as laptops or tablets at their disposal. Online teaching in some developing countries, such as less developed countries like Pakistan, cannot achieve the desired results because of the low penetration of network devices and the Internet, so it is impossible to establish an online teaching system in a short time, let alone manage it. However, online teaching had proven to be a new model to replace traditional education influenced by the Covid-19 pandemic and had driven the technology solutions to be implemented at the core of the education system. Along with disseminating and obtaining education, it took time to learn to master new technologies. The evolution of technology was unlikely to stop, it will only get faster, so students and teachers needed to acquire the technical skills to teach online as soon as possible and adapt to this new way of teaching.

In the context of the Covid-19 pandemic, the teaching activities of Rangsit University have been greatly affected, offline teaching has been significantly impacted, and online teaching has been gradually developed, but it cannot be ignored that the online teaching condition of Rangsit University is not good, few online teaching activities have been carried out in the past, the platform and equipment of online teaching are not perfect, and online teaching is different from offline face-to-face teaching activities, which makes Online teaching is different from offline face-to-face teaching activities, which makes it difficult for students to concentrate and directly affects students' learning attitude, which has an extremely negative impact on the quality of online teaching. Given this, this paper tries to explore the factors influencing the quality of online teaching at Lancian University in the context of the Covid-19 pandemic. Based on this research, it is hoped that the quality of online teaching can be improved based on the improvement of learning attitudes, concentration, and platform equipment, which will lead to the smooth implementation of online teaching activities during the Covid-19 pandemic, and during the same time, it is hoped that it can provide important countermeasure references for other universities to carry out online teaching activities.



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2. Objectives

Scholars at home and abroad have expressed different emphases on the concept of online teaching and learning, but there is a consensus on the definition of the core elements of online teaching and learning, that is, the behavior of teaching and learning belongs to different time and space, technical support plays a key role in the use of online teaching and learning, and teachers should have certain information literacy. How is the quality of online education evaluated? The most direct test is the feedback of learners' experience. Therefore, the research goal of this paper is to understand whether learning attitude, concentration, teaching platform and equipment will affect the quality of online teaching, and put forward some suggestions to improve the quality of online teaching.

3. Literature review

In December 2019, several cases of unexplained pneumonia where a history of exposure to seafood markets in South China were present, had been identified in hospitals in Wuhan, Hubei Province, China, and were confirmed as an acute respiratory infection caused by the Covid-19 pandemic (Agyeiwaah et al., 2022). Following this, the outbreak spread worldwide, infecting almost all countries and regions. At the same time, countries around the world began to promote daily protective measures such as wearing masks when going outside, taking care to avoid contact with some patients infected with the new corona virus, and taking care to wash their hands regularly. It is clear that the Covid-19 pandemic has had a dramatic impact on people's daily lives and that avoiding large gatherings and rallies has become one of the strategies for caring for the public. Due to the rapid rise of the Covid-19 pandemic cases in literally every country, closing education institutions seems to be the right move in order to break the chain of this infectious disease (Muhd et al., 2021). As a result, many educational institutions have stopped in-person teaching and moved away from the traditional teaching model to an online one, and a massive experiment in online education had swept the world, with countless teachers and students flocking to online teaching platforms (Shaïd et al., 2021). In a sense, the Covid-19 pandemic had facilitated mankind's entry into digital learning, and online teaching had gradually become a mainstream trend.

Online teaching had now proven to be the most effective remedy for this unprecedented worldwide epidemic. And in the long run, online teaching was by no means just an emergency response to the epidemic; it was likely to lead education into a whole new era, promoting a networked and intelligent education ecology. Of course, this means that all teachers and students will need to adapt to the new changes brought about by information technology and modernization. In the later period of the Covid-19 pandemic, in order to minimize the negative impact of the epidemic on school education, the Ministry of Education of Thailand required local educational institutions to choose a flexible teaching model combining online and in-person teaching according to the actual situation. At the same time, concerns arise as to whether the quality of online teaching that had developed over a short period was comparable to that of offline teaching that had been used consistently over a long period. Reviews of the quality of online teaching were polarised, with one side praising its benefits, saying that it was convenient and enhances people's interest in learning. Others believed that it made learning less effective because of the inability to conduct in-person teaching, the interactivity and teaching effectiveness were poor. While online learning offers flexibility, convenience for both instructors and students in timing and location, and has the potential to reach students with limited access to higher education due to socioeconomic, financial, educational, and personal reasons (Davis, 2000; Hara & Kling, 2000; Haugen et al., 2001; Liaw & Huang, 2002; Chen et al., 2010; Flowers et al., 2012; Hansen & Reich, 2015; Willging & Johnson, 2009; Biel & Brame, 2016; Seaman et al., 2018), studies have shown some online delivery formats that could diminish the student experience, impair the ability of students to connect with faculty, decrease instructional quality, and minimize instructor-learner interactions (Hara & Kling, 2000; Laine, 2003). Students may also feel isolation, frustration, anxiety, and confusion (Hara & Kling, 2000; Piccoli, Ahmad, & Ives, 2001). Therefore, while adapting to this set of changes, there was certainly a need to look at the quality of online teaching and learning.

Electronic devices and online teaching platforms are vital to online teaching and learning, and assisting institutions and teachers to continue teaching during times of universities closures. Even if all of these components are perfect, there is still no guarantee of the ultimate quality of teaching and learning. Factors caused by distance make it impossible to accurately guarantee the quality of online teaching and learning. Compared to the popularity of home computers and the internet, Thailand has the highest proportion of home owned televisions in ASEAN countries, with 98% of households owning home owned televisions. Therefore, in addition to online teaching,



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Distance Learning Television (DLTV) had become the main method of digital education in Thailand during the pandemic. At the beginning of its establishment, DLTV was mainly aimed at primary schools or schools in remote areas to address the shortage of teachers in these areas. Therefore, the quality of teaching in some remote areas may be worse. From the perspective of schools and teachers, they also needed to rely on the stability of the online teaching platform to ensure the quality of teaching and learning. The stability of an online teaching platform was based on technical guarantees and a strong teaching system. Choosing a technically stable and functional online teaching platform is the only way to achieve satisfactory teaching quality and results (Gopal et al., 2021). Common emerging online teaching tools today include Microsoft Teams, Zoom, and Webex, among others. Students, needed to be prepared with electronic devices to access online teaching platforms. The choice of electronic devices often depended on the financial circumstances of the student, and many economically disadvantaged students in developing countries cannot afford to buy suitable online learning devices. In such cases, even the most exciting lectures by teachers may not be fully understood due to the lack of necessary electronic devices. In addition, using various media for learning can easily lead to physical fatigue, such as visual fatigue when staring at the monitor screen for a long time; When using a computer for a long time, the fixed posture of the body can bring fatigue to the waist and back, which could also affect learning efficiency.

In addition to objective factors, the attitude and concentration of students as participants in online learning are also subjective factors affecting the quality of online teaching. Everyone's concentration level is different, and those with poor concentration are prone to wander off. When students are not focused enough, the quality of teaching will be affected (Lemay et al., 2021). Due to the lack of focus in the classroom, learning efficiency decreases, and coupled with the lack of teacher supervision in online learning, some non-disciplined students may cheat, for example, by looking for answers online or by copying and pasting directly, which reduced the quality of work done and led to poor learning and teaching. Students' academic performance may deteriorate in the final examinations of the course due to reduced interaction time with tutors and lack of consultation with educators when faced with challenges in online learning and understanding. The student's average performance before the coronavirus was found to be higher than their average score during the coronavirus (Bernard & Samuel, 2021).

When it came to the online assessment of the quality of online teaching and learning, many schools had not been able or at least not fully implement procedures for such assessment due to the large number of students involved. Universities are obliged to use innovative measures to help overcome the limitations of virtual teaching and learning as a basis for ensuring the quality of teaching and learning (Kebritchi et al., 2017). Teachers are actively working with schools to implement teaching and develop online teaching methods as a way of engaging students' attention (Fatani, 2020). Various educational organizations are making their tools and solutions freely available to assist and facilitate learning and teaching in a more dynamic and engaging atmosphere (Yuzulia, 2021). Students needed to have a positive attitude towards learning and choose a quiet and distraction-free environment to participate in online teaching and learning, which was conducive to allowing for increased focus and learning. Time and resources must be invested in exploring and researching the educational needs of these learners to provide the best solutions for adaptation now and in future cases.

From the current scholars' research, it can be found that scholars have made relevant research on online teaching and the influencing factors of online teaching quality, and have also formed corresponding research results. Some online teaching forms may weaken students' experience, damage students' contact ability with teachers, reduce teaching quality, and minimize the interaction between teachers and students. Students may also feel isolated, depressed, anxious and confused. Choosing an online teaching platform with stable technology and perfect functions can achieve satisfactory teaching quality and effect. Learning with various media can easily lead to physical fatigue, such as visual fatigue when staring at the monitor screen for a long time; When using the computer for a long time, the fixed posture of the body will bring fatigue to the waist and back, and it will also affect the learning efficiency. It cannot be ignored that there is a lack of research on the evaluation of online teaching quality when discussing the influencing factors of online teaching quality. This kind of evaluation is common in online teaching forms under the epidemic situation in COVID-19, so it is necessary to analyze it. In this context, this topic attempts to explore the factors that affect the quality of online teaching through case study and questionnaire survey of Shi Lang University, so as to promote the continuous improvement of online teaching quality and the smooth implementation of online teaching.

4. Conceptual Framework

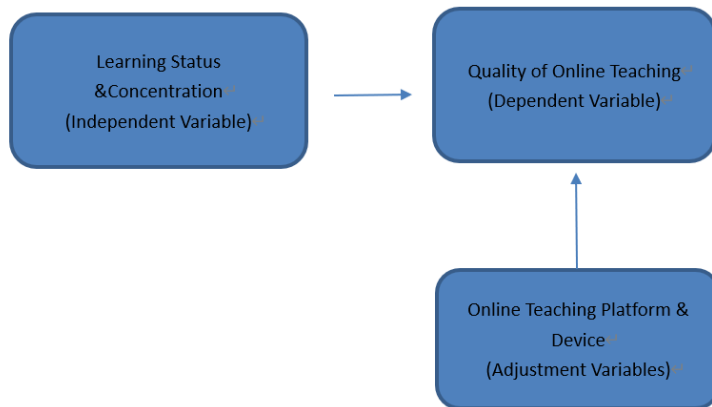


Figure 1 Conceptual Framework

The conceptual framework of this paper consists of three parts. Affected by the Covid-19 pandemic, the teaching model had been completely transformed from pre-pandemic times, and online teaching had become the new norm. Students, as the main recipients of education, had their learning attitude and concentration naturally affected by the quality of teaching and learning. The online teaching platform and the devices used influence online teaching significantly, and also brought different teaching quality and user experiences to students. Measures to enhance and improve the dependent variable were derived from the analysis of both the independent and moderating variables.

5. Material and Methods

In this paper, in the process of evaluating the factors affecting the quality of online teaching during the Covid-19 pandemic, Rangsit University was chosen as the case study object, mainly because the author had the experience of studying at Rangsit University, which could facilitate the distribution and recovery of questionnaires and better carry out the work of questionnaire analysis and research. In the process of implementing online teaching, it will be affected by factors such as learning status, attention, platform, and equipment, and also by various factors such as teaching methods and teaching management, etc. Combining with the actual situation of online teaching at Langshi University, we finally choose to explore four factors: learning status, attention, platform, and equipment.

The study was quantitative in nature, as it involved gathering data through a questionnaire to determine the conditions of the participants. In the study "Online Learning at Rangsit University, Questionnaire for Evaluating Students' Perceptions ", data collection, data preparation, and analysis were conducted to obtain access to different conclusions and influencing factors.

5.1 Research Design

The 29-question online questionnaire was successfully created via a Google Form and distributed to Rangsit University students via Line and WeChat platforms. This approach protects the privacy of personal information and other information of those who participate in the questionnaire. After defining the purpose of this study, the conceptual framework of the study was defined by reviewing database literature and academic articles as references. This study aimed to explore the factors that affected the quality of online teaching and learning through students' attitudes and concentration, as well as the online teaching platforms and devices used by students, and to derive appropriate enhancement and improvement measures from them.

5.2 Data Collection

The online questionnaire was distributed on November 1, 2022. This data collection method is not only user-friendly and easy to operate but also reduces research costs and greatly improves the efficiency of the data



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gathering. By its completion on November 20, 2022, this questionnaire had received 325 responses, and all the data obtained was analyzed by a statistical package to obtain the results of the data analysis and research.

5.3 Hypothesis

The primary purpose of this paper was to understand and determine the value of online teaching quality by students at Rangsit University in Thailand. The second and third purposes were to analyze students' learning attitudes and concentration as well as attitudes toward the use of different online education platforms and devices. The final aim was to propose future measures to improve the evaluation of online teaching and learning and the efficiency of online teaching and learning. Based on these objectives, the following hypotheses were derived:

H1: Students' learning attitudes and concentration affect the quality of online teaching at Rangsit university.

H2: Online teaching platforms and devices affect the quality of online teaching at Rangsit university.

5.4 Research Instrument

In this paper, Yamane's formula was used to calculate the sample size of participants in a questionnaire to find out how college students at Rangsit University in Thailand perceive receiving online teaching during the Covid-19 pandemic. The study population for this study was 1500 people (the number of college students at the International College of Rangsit University, Thailand as on November 20, 2022). The expected error is 0.05 degree, so the sample size of the population is 315. This study received 325 questionnaire respondents and the formula used to calculate the required sample size is shown below:

n = Sample size

N = Population size

K = Constant

e = Tolerance of the sample

$n \approx 315.79$

In addition, some of the questions covered in the second part of the questionnaire on personal experiences with online teaching and the third part on personal perceptions of online and offline teaching make use of scales, which are ranked from 1 to 5 on a scale from low to high. Respondents expressed their responses by accepting the filling out of such a form.

5.5 Questions in the summarized questionnaire

This questionnaire consists of three main sections: respondent information, personal experience with online teaching, and personal perceptions of online and offline teaching.

The first part is the respondent information, and the participants of this questionnaire are required to fill in the responses according to the information of their institutions and majors. The results of this section were used to analyze the basic information of the respondents in order to provide averages.

The second part is the personal experience of teaching online, such as what online teaching platform is generally used for online teaching or what equipment is used for online teaching. By comparing and analyzing the data collected in this section, the advantages and disadvantages of online teaching platforms and devices were identified, and the factors of online technology that affect the quality of online teaching were derived.

The third section is about personal perceptions of online and offline teaching, such as learning attitudes and concentration, as well as perceptions of the quality of teaching in different delivery methods. This leads to the conclusion that students' learning attitudes and concentration have an impact on the quality of teaching and



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learning. The data collected from the questionnaire all help this study to answer the first three research objectives and thus to derive the fourth research objective.

6. Questionnaire Data

The first part: respondent information.

Table 1 Respondents' major profile at Rangsit University

Major	Number of respondents	Percent
International Business	156	48.0%
Information and Communication Technology	57	17.5%
International Hospitality and Tourism	53	16.3%
Communication Arts	43	13.2%
Other	16	4.9%
Total	325	100%

After collecting the data, it was analyzed using a statistical package, and the results of the analysis are explained here. Table 1, the first question which shows the personal information data of the respondents. Of the 325 responses received, 156 respondents (48%) were from International Business. 57 respondents (17.5%) were from Information and Communication Technology. 53 respondents (16.3%) were from International Hospitality and Tourism. 43 respondents (13.2 percent) were from Communication Arts. Finally, there were 16 respondents from other majors (4.9%). Table 1 shows that the majority of respondents came from the major of International Business.

Then, the second part: personal experience with online teaching. It contains four questions.

First, respondents' electronic devices used to conduct online teaching. It represents the electronic devices used by the respondents to conduct online teaching and learning. 111 respondents (34.2%) used only laptops for online teaching and learning. Next, 76 respondents (23.4%), used both electronic devices for online teaching and learning, 73 respondents (22.5%) used only cell phones for online teaching and learning, and finally 65 respondents (20%) who used iPads for online teaching and learning. So the highest proportion belongs to the use of the laptop for online teaching and learning. The lowest percentage of respondents used iPad for online teaching and learning.

Second, problems encountered by respondents in using electronic devices for online teaching. It shows the primary problem respondents encountered when using electronic devices for online teaching. There were 123 respondents (37.8%) who had encountered Equipment issues (microphone, headset, camera, etc...) when using electronic devices for online teaching. Internet connection was encountered by 102 respondents (31.4%). Platform problems were encountered by 99 respondents (30.5%). Finally, 1 respondent (0.3%) encountered other problems. This shows that most of the respondents had encountered equipment issues (microphone, headset, camera, etc...).

Third, respondents visit the online teaching platform of online education. It indicates the online teaching platforms that respondents preferred to use for online teaching. Options include Microsoft Teams, Google Classroom, Zoom, WebEx, and others. There are 175 respondents (53.8%) who prefer to learn online through Microsoft Teams. 71 respondents (21.8%), preferred to learn online through Google Classroom. 40 respondents (12.3%) preferred to learn online through Zoom. WebEx was preferred by 37 respondents (11.4%). Another 2 respondents (0.6%) preferred to learn online through other online teaching platforms. It can be concluded that most respondents preferred to learn online through Microsoft Teams.

Fourth, scale of respondents' preference for using electronic devices and online teaching and learning platforms for online teaching and learning. It shows whether the respondents preferred to use electronic devices



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and online teaching and learning platforms for online teaching and learning. A scale of 1 to 5 indicates dislike (1) to like (5). 15 respondents (4.6%) selected scale number (1), indicating that they disliked using electronic devices and online teaching and learning platforms for online teaching and learning. 30 respondents (9.2%) selected scale number (2), indicating that they did not prefer using electronic devices and online teaching and learning platforms for online teaching and learning. 89 respondents (27.4%) chose scale number (3), indicating that their experience was average. There were 108 respondents (33.2%) who chose scale number (4), indicating that they liked using electronic devices and online teaching platforms for online teaching and learning. 83 respondents (25.5%) chose scale number (5), indicating a strong preference for using electronic devices and online teaching platforms for online teaching and learning. From this table, it can be seen that the proportion of respondents who preferred to use electronic devices and online teaching platforms for online learning is the highest, while the proportion of respondents who do not like to use electronic devices and online teaching platforms for online teaching is the lowest.

Last is that personal perceptions of online and offline teaching. It contains three questions.

First, scale of concentration during online teaching. It shows the concentration level scale for the respondents while teaching online. A scale of 1 to 5 indicates not enough focus and easily distracted (1) to enough focus and not easily distracted (5). 16 respondents or 4.9%, selected scale number (1) indicating that they were not focused enough and easily distracted while teaching online. 51 respondents (15.7%) selected scale number (2), indicating that they are less likely to concentrate. A total of 103 respondents (31.7%) chose scale number (3), indicating that their concentration was average. 95 respondents (29.2%) selected scale number (4), indicating that they could moderately control their concentration. 60 respondents (18.5%) selected scale number (5), indicating that they are sufficiently focused and not easily distracted. From this, it can be concluded that most of the respondents can moderately control their concentration and concentrate on online teaching.

Second, scale of self-directed learning ability when teaching online. It represents the scale of respondents' self-directed learning ability when learning online, on a scale from 1 to 5, from low to high. According to the figure, the majority of representatives chose scale number (3) or medium level to express their ability to learn on their own, with 125 respondents or 38.5%. 101 respondents or 31.1%, chose scale number (4). 51 respondents or 15.7%, chose scale number (5). 31 respondents or 9.5%, chose scale number (2), which indicated that they were not as good at independent learning. Finally, 17 respondents or 5.2%, chose low independent learning skills.

Third, scale of the extent to which respondents learn to solve assignments through online teaching. It indicates whether the respondents were able to learn to solve their assignments through online teaching. The scale ranged from 1 to 5, low to high. 46 respondents (14.2%) selected scale number (1), saying they could not learn to knowledge-solve assignments through online instruction. 67 respondents (20.6%) selected scale number (2), saying that they were less able to learn to solve assignments through online teaching. The highest percentage of 103 respondents (31.7%) selected scale number (3), saying that they could solve part of the assignment through online teaching and learning. 83 respondents (25.5%) chose scale number (4), saying that they could solve their assignments through online teaching and learning. 26 respondents (8%) chose scale number (5), saying that they had no problem at all solving assignments through online teaching and learning, which was the least.

7. Results and Discussion

An interpretation of the results of the above data analysis leads to the following conclusions. First, of the 325 responses received, only 45 respondents did not prefer learning through online technology, which indicates that most students are willing to use electronic devices and learn through online teaching and learning platforms. This is mainly because students favor the use of convenient platform tools that can facilitate online learning activities and contribute to the increasing efficiency of online learning and teaching activities, so devices can have a greater impact on the quality of online teaching and learning. Second, the results show that 123 respondents



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encountered electronic equipment malfunction during online instruction. Some respondents also encountered network problems and platform issues. In the process of actually receiving online teaching activities, they are affected by the unstable operation of the platform, which can affect the smooth running of teaching activities, so it can be found that the platform can affect the quality of online teaching. Third, 103 respondents believed that they could only partially learn and solve assignments through online teaching, and 17 respondents indicated that they could not learn and solve assignments through online teaching. When it came to questions about attention and independent learning skills, the majority of respondents selected item 3 on the scale, which is only a moderate level. Respondents have access to more resources and help to achieve more effective solutions to homework problems and improve students' learning status and attention based on online instruction, so it can be found that learning status and attention affect the quality of online instruction. Therefore, to solve the problems that may occur when taking online courses, schools should enhance the maintenance of their online course systems to ensure that students are not prevented from attending classes due to technical problems in online courses. Teachers should pay more attention to students to make sure they can understand the lessons taught. If students have questions and feedback after class, teachers should also answer and address them carefully. Students should listen carefully and bring any problems to the attention of the teacher or the school, and then work together to improve the quality and efficiency of instruction.

8. Conclusion

The Covid-19 pandemic started in 2019, which had greatly affected the education industry. At the same time, online teaching had highlighted its characteristics by combining with the technical resources of the Internet platform, and the channel of online teaching has made online teaching the preferred way for teachers and students. There are two sides to everything, and online learning is no exception. Rangsit University International College (RIC) students had different perceptions about the quality of online learning. Some believed that online learning was a powerful way to alleviate the urgent needed for education in the context of the epidemic and to fully share teaching resources online. However, others believed that the online learning atmosphere was insufficient and lacked in-person communication. In addition, there were also some people who believed that there was no particular difference between online and in-person teaching. According to the collected data and analysis results, the students' evaluation of the quality of online teaching was only at a moderate level, as the vast majority of respondents believed they could learn to solve only part of their homework through online teaching.

At the same time, students' learning attitudes and concentration had an impact on the quality of online instruction at RIC. Because most students felt that they were not able to stay focused on the content of the course at all times while participating in a long period of online teaching, they were easily distracted and lost concentration. This was one of the reasons why the quality of online teaching was affected as concentration represents the student's attitude toward learning, and a low level of concentration led to a lax attitude toward learning, which affected the level of teaching and learning quality. The results show that most students chose the number 3 on the scale when it came to questions about concentration and independent learning ability, which was only at a moderate level. In addition, online teaching platforms and devices influenced the quality of online teaching at RIC. Almost all students experienced technical problems such as electronic equipment failure or network platform failure during their participation in online learning, which meant that students were likely to be unable to participate in the course due to server or software crashes, resulting in issues not uncommon to online learning such as failure to log in to the online teaching platform or video lag which affects the quality of teaching and learning (Gonzalez et al., 2020).

Based on the results of the data, it can be concluded that measures to improve the quality of online teaching, include the duration of online teaching needing to be designed appropriately, breaks needing to be provided appropriately, and online student-teacher interaction needing to be continuously improved. Excessive instructional length can lead to a lack of sustained concentration for most students. The use of interruptions, interactions, and online quizzes will in turn attract students' concentration, influence their learning attitudes, and achieve a steady improvement in the quality of online teaching. Moreover, the university can further strengthen the construction of hardware facilities for online teaching and improve all functions of the platform. In order to further strengthen the quality monitoring of online teaching and learning, the university can also build a feedback mechanism for the teaching effect (She et al., 2021). Students can make efforts to improve their learning



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experience by choosing a suitable physical environment to help them enter the learning state. Before participating in online teaching, they must pay attention to checking the status of the electronic devices used and the network connection to avoid network delays and lagging during the learning process, which will affect the absorption of teaching focus and learning enthusiasm. Through these practices to help improve the quality of online teaching, students' learning efficiency will also be improved. It is foreseeable that in the future, with the gradual deepening of the development of education and technology, online teaching and learning will still be adopted by educational institutions and universities, and will also be gradually developed and improved.

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