

INFLUENTIAL AND SUPPORTING FACTORS TO STUDENTS' ONLINE LEARNING QUALITY AT UEH FROM FEBRUARY TO JUNE, 2020.

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Abstract

COVID-19 pandemic started with several of the early cases in December 2019 from Wuhan, China then spread out all over the world since February 2020. The World Health Organization later made an official announcement to address the COVID-19 as the world pandemic. It became a totally new experience to every human life's aspects from social distancing, online education to pandemic lock down or quarantine all suspiciously infected people. In Vietnam, almost all schools and universities switched to online learning and teaching to encourage students to finish their on-going semester. This created both challenges and opportunities to all educational institutions during the process of organizing and managing the online classes. There were problems with the online platforms, Internet connections, learners' motivation, ... It was; however, the opportunities for teachers and students to have greater access to knowledge and information faster and more convenient than the traditional offline learning and teaching. This research was conducted to have a better look at the factors influenced on the online learning; consequently, raised some possible recommendations to enhance the quality online learning experience.

Key words: online learning, influential factors, online platforms

1. Introduction

Because of the 4.0 Industrial Revolution's advantages, more and more people around the world are familiar with the universal Internet accesses with their electronic devices. Demands for information exchange or knowledge acquisition using Internet are significantly increasing. Hence, online learning and online teaching are more popular to most educational institutions around the world. It will be applied together with the traditional offline learning and teaching; and gradually replace the face-to-face classrooms. Teaching and learning online has been mentioned and optionally implemented since 2006 (Nguyễn Thuận Quý, 2016); but it is not widely common until the COVID-19 pandemic. Since February 2020, most schools and educational institutions were closed by laws to prevent the corona virus infection. The teaching and learning online just started as a must for them to finish the on-going semester; in accordance with the encouragement from Vietnamese government "Stop going to schools, not stop learning and studying".

This led to some problems to the Internet connection and the online platforms; especially the LMS, when they became difficultly inaccessible because of the overload to the system. The reason obviously was the sudden surprisingly increase in the servers' traffic. Second, most students went back to their hometowns and used the 3G to connect the Internet. The quality of Internet connections there was definitely far below the stable surfing or watching the videos online. On the other hand, because of the social distancing laws from the government, students did not have many other choices for their online learning. Third, we

had to consider about the readiness from both students and teachers for the online learning and teaching. The COVID-19 happened so quickly and dangerously, therefore, there were various negative attitudes from both teachers and students when they had to change their learning and teaching environments suddenly. The low-tech teachers had to struggle with the online teaching at first, until the sufficient training support from UEH.

2. Literature review

2.1. Definition of e-learning

Lee et al (2004) indicated some forms of online training as following: (1) Technology-based teaching – TBT, (2) Computer-based teaching – CBT, (3) Web-based teaching – WBT, (4) Online learning/teaching – OL/T, and (5) Distance learning – DL. In this research, we will focus on the combination of (3) and (4), which is considered as E-learning to most students and teachers.

In Vietnam, Biều (2012), Nguyễn Phước Tài (2016) and Nguyễn Hồng Việt (2019) summarized the activities of e-learning as below:

□ We need a computer connected to Internet and an account from any of e-learning applications, such as LMS BlueButton, Google Meet, Microsoft Teams,... to attend an online class. (Bondarouk & Ruel, 2010; Nguyễn Phước Tài, 2016). We have teachers, students, class' materials/resources available except for the physical classrooms and blackboards. Students can learn from wherever they have the Internet connections. Specifically, we will research on the synchronous online classes where all the teachers and students have to be online using the same platforms at the same time. According to this online format, all materials and activities have to be closely related to online resources on the Internet such as: documents' files, email, forum, chat utilities, voice chat, voice recording, instant messaging, video clips, interactive activities, simulations, websites.

□ Online learning/teaching at UEH during the COVID-19 pandemic is a form of using the Internet connections to create online classes, then applying the synchronous learning and teaching online. This is actually like the video conferencing, the participation of all related parties using the same platforms at the same time. At first, some teachers used the social networks such as Facebook, Zalo,... Then upgraded to more secured and confidential applications such as Google Meet, Microsoft Teams... based on the internal Gmail accounts of UEH. When attending these online classes, students were usually asked to turn off their microphones and cameras so as not to distract the lectures and their friends' concentration. This, however, helped students feel safe and stay away from their teachers' observation. They were so much distracted by the house chores, surrounding noises, movies, music or sometimes slept during their teachers' streaming. It requires teachers to have some groups' activities or students' contributions for the lessons.

2.2. Benefits of e-learning

There are a great number of benefits of learning and teaching online as previous research from Biều (2012); Võ Thúy Diệp (2016), Nguyễn Hồng Việt (2019) had noted down as following:

□ Online learning based on the Internet, which helps learners get limitless access to their lessons, to their necessary knowledge in a convenient way. The number of students in an online class are far bigger than the traditional classrooms. This will definitely benefit the teachers, schools, universities in fulfilling their missions of transferring the universal knowledge to as many learners as they can.

□ Coursebooks and course materials are consistent and various with the huge data on the Internet. Students can get updated and precise information online while they are still in the course. This will help teachers and students adapt quickly with any changes in testing and assessment. Moreover, the students' progress and tests' results are almost immediately reported to all at the management levels.

□ Online learning helps students proactively manage and independently self-modify their study themselves. This will increase the “individualization” in education (Lê Tấn Huỳnh Cẩm Giang, 2016). Students can confidently adjust their own motivation during the course, watch the needed information multiple times, choose which parts of the lessons to follow or miss what they already know about,... without any stress of being observed or controlled or commented by their teachers. Online learning also help students' self-study and communication skills improved and developed in a professional manner. They will practice by the ways of communications with their friends and teacher via emails, social networks; or learn how to analyze the vast information on the Internet or problem-solving skills (Nguyễn Thuận Quý, 2016).

□ Online learning is a perfect combination of audio and visual receiving process. (Võ Thúy Diệp, 2016). For instance, 100 students may have the same quality of audio and visual parts of the lectures when they are online using Google Meet for an online class. Compared to an offline class in a physical classroom, students will have different quality of perceiving the lectures according to their positions inside the classroom.

□ Last but not least, online learning helps learners save more time and money on accommodations, traveling to and from schools, printed documents, hand-outs or course books. (Biều, 2012).

3. Research context and methodology

UEH had officially switched to online teaching since February 2020 when the COVID-19 pandemic was a serious thread in Ho Chi Minh City, Vietnam; together with the encouraging ideas from Professor Phung Xuan Nha, Minister of Education and Traing, of “Stop going to schools, but not stop learning.” Teachers and students are used to with the LMS, which has been integrated to the process of teaching and learning at UEH since 2016. Most students, nowadays, have laptops, smart phones, available Internet connection,... which help them adapt quickly to the sudden switch to total e-learning. The author selectively conducted this research with 100 students in the middle of their Business English classes, which were assigned to the author from the beginning of the first semester in 2020. The online questionnaire was delivered together with quick interview after each

online class. Each question was design to get the most convenient answer based on 5-point Likert scale.

4. Data analysis and discussion

From the teachers' points of view, there are some obstacles preventing them from providing quality online teaching such as: their computer skills, their organizational skills for online classes, their interactive streaming skills,... However, in this research, the author focused more on students' opinions about factors influencing and supporting their online learning.

4.1. Online learning experience

The results showed that most students merely started their 100% online classes since February 2020 when the COVID-19 pandemic started to spread out in Vietnam and all over the world. There were totally 93% students chose the answer of fewer than 4 times experiencing online learning before. It was just 7 % students had joined the online classes more than 6 times. They werenot technologically and mentally prepared and trained for the synchronous online classes. They didn't have plans and appropriate methods to effectively study online.

b. Desktops, laptops

Most students used desktops, laptops as their major devices to join all their online classes. According to the survey, approximately 80% students agreed that desktops and laptops efficiently supported their online learning. It was 32% participants agreed and 47% strongly agreed respectively. There were, however, almost 20% participants showed their neutral opinions. This might be because: (1) some students used their smart phones for their online learning, (2) their computers' performance was not compatible with the online learning software, lacking of some helpful functions such as microphones or webcams to interact with their friends and teachers, (3) the Internet connections or the competent computer skills,... Consequently, computers play an important role in making the online learning experience of the learners a success or a failure; or the feasibility of the e-learning implementation in any institution.

c. Smart phones

From the survey's results, 70% students own a laptop or a smart phone and 30% students possess a laptop and a smart phone or a tablet. There were just 5% participants strongly agreed that smart phones well supported their online learning; meanwhile, it was the same 40% students agreed and 40% showed their neutral opinions respectively. There were also 10% participants disagreed and 5 % students strongly disagreed with the useful support of smart phones for their online learning. There were some reasons for those opinions: (1) students used only desktops or laptops for their online learning, (2) their smart phones' system configurations were not compatible with the online learning applications, (3) the screens on smart phones were not big enough to show all the necessary information, (4) most online learning applications were just optimized for a maximum satisfied experience

on desktops or laptops; students had difficulties in sharing their screens, sliding among screens or opening their chatting rooms.

d. Internet connection

Based on the survey, most participants agreed or strongly agreed that Internet connection importantly influenced on their online learning. There were only 7% disagreed and 3% strongly disagreed with that opinion. In reality, most participants were from some other provinces outside Ho Chi Minh City; while a great number of participants were from the countryside when the survey was delivered during the COVID-19 pandemic. Most complaints about the quality of students' online learning were from the Internet connection. Most students had only 3G connection in their hometowns instead of 4G or Wifi connection like when they were in Ho Chi Minh City. In addition, before the COVID-19 pandemic happened, the LMS of UEH could host maximum 2000 users at a time. It led to the overloads or crashes when the maximum number was reached. Moreover, most online applications such as Zoom, Google Meet, Microsoft Teams, ... had the host servers outside Vietnam. They would be slowed down or disrupted when there were some accidents about the fiber-optic cables. There were also some dangerous risks of losing the users' data or privacy. From the last quarter of 2019 to April 2020, the AAG - Asia America Gateway had multiple troubles and had to be fixed continuously in several days. For example, the Internet connection from AAG had been interrupted and extremely slow from April 2nd until April 21st 2020

e. Surrounding noise

There were a lot of complaints of the surrounding noise, which significantly distracted students from their online learning. This came from various reasons such as the open air in most houses in the countryside, the echo from the sound, the kids playing around, ... The noise could be from students accidentally turning on their microphone or even from the teachers' surrounding environments. Obviously, both teachers and students, not everyone had perfect studio or sound-isolated room for their online teaching and learning. The survey stated that approximately 90% students were knowledgably affected by the distracting noise during their online learning (with the proportions of 23% of normally affected, 42% of strongly affected and 25% of extremely affected). This made their online learning a bad experience with several distractions. Only 3% students said they had no complaints, meanwhile, there were 7% students rated the low influence of the surrounding noise.

f. The effectiveness

In recent years, the 4.0 Industrial Revolution has significantly developed and supported to education and training, especially influenced on renovating the learning and teaching methodology. Pros and cons of e-learning exist and depend on participants' purposes and goals, the learners and different formats of e-learning classes. This would be one of the most controversial evaluation because of the mentioned reason above. Most students have limited experience about e-learning, which may lead them to inexact conclusions for their learning online experience. Only 15 participants concluded that they had good quality

online learning. There were 44 students said it was good while 26 others agreed to the acceptable good. It had 12 students claimed just little effective learning online. And the rest 3 students considered it as a waste of time when attending online classes. The reasons are closely related to the following survey's results.

g. Influencing factors

From the author's teaching experience and students' feedbacks during the e-learning time at UEH, there were some factors influencing on the students' online learning including the available facilities (desktops, laptops, smartphones, apps), Internet connection speed, teachers' capabilities in managing online classes, learners' autonomy, learning motivation. Most students (92%) complained about the bad Internet connection speed, which made them suffer during the online classes. In fact, this was an external factor, out of the control of the IT team or UEH staff as well as the Internet suppliers in Vietnam. Second, about the learners' autonomy, 70% students rated it as an important influencing factor. It proves that students' awareness is always a key factor to any format of learning and teaching (online or offline). It helps students adapt quickly in any circumstances and have greater access to necessary knowledge and information.

Next, the learning motivation and environment were reported as a key factor influencing on the learning process with 60% students agreed in the survey. 35% students agreed to consider teachers' capabilities in managing the online classes as an important influential factor to their learning online. This illustrated different viewpoints from different angles between teachers and students. For students, they just cared about whether or not to have interesting atmosphere, fun lectures, exciting participations from their friends,.. during the online classes. However, from the pedagogical methodology, these listed above standards was also from the teachers' capabilities, class management, tactics and strategies during their lectures. Teachers could deliberately guide students to the positive learning attitude with appropriate and suitable interactions. For instance, at the first online classes, very few students were ready to speak or discuss when asked. The teacher had to use some positive tactics such as giving bonus marks for active participations, checking students' attendance by their voices, funny entertainments like singing during the breaks,... Positive results were recorded almost immediately in next online classes such as noisy and active groups' discussion, personal questions and contributions for the lectures, improved quality of weekly assignment and homework,...

Facilities accounted for 45% in the rating results of students as the important factor ; as a result, it was not the most ultimately key factor influencing the effectiveness of the whole e-learning process.

h. Recommendations from students

There were some recommendations from the students' demand to UEH e-learning project as following: (1) UEH should support students' online learning with the private servers to avoid crashes or overloads of LMS or e-learning apps. This is somehow out of the schools and universities' control and power. It could be, however, a useful recommendation for the

Vietnamese government to enhance the e-learning adaptation in future as the global trend in the 4.0 revolution. (2) Teachers should all use the same e-learning apps. UEH had not restricted teachers in using any apps to focus more on the teaching/ lecturing effectiveness based on the competency and familiarity in using their favorite apps. This was mostly because of the sudden switch to total e-learning, which spared no time for teachers and students to prepare and choose the same most appropriate apps. In future, this should be changed to using only 1 most appropriate app for UEH e-learning. Of course, it should happen only after careful research and analysis all the pros and cons of all available resources from UEH. It will take time for consideration and adaptation from the world models of successful e-learning courses such as Coursera (USA), Future Learn (Britain), EdX (USA),... (4) Teachers should record the lectures and pre-post or upload the contents, the slides in advance before the online classes start. Most online learning apps functionally support recording all the streaming lectures. However, from the teachers' viewpoints, this can make a bad habit for students when they may lose their focus, passion and motivation during the lectures. They may feel abundant and overconfident about all the available resources and pay less commitment to the online classes. This problem can be possibly solved with less materials and more interactions of all teachers and students during the online classes.

6. Recommendations for UEH

From the results of the research, the author would recommend some possible solutions for a quality and sustainable e-learning system at UEH in future. First, UEH should improve the capacity of the LMS servers, purchase the larger Moodle authority of usage, increase the popularity of applying LMS and e-learning combined with traditional offline classrooms, invest in the online library, promote the e-learning courses. They are all necessary actions to promote and enhance the e-learning experience at UEH. UEH should also encourage and have special incentives for teacher to compile or create the qualified e-learning lesson plans. More investments on teachers and students' training courses to efficiently adapt the e-learning system at UEH; and also, on the IT staff to deliver available tutorials and immediate support to teachers and students during the online classes. Workshops, seminars on topics related to e-learning should be frequently organized to offer sufficient competency to both teachers and learners. Second, a qualified system of training and testing the outcome of the learners should be primarily developed to maintain the quality results for all the e-learning courses. There are obvious differences between online and offline testing methods and formats. Teachers should be well trained on e-learning testing. Third, consider the specific case study of Vietnam, the total e-learning applications for all the educational institutions are suitable solutions for a continuous learning and teaching. We just need to manage and modify all the available pros and cons to adapt as quickly as we can. In future, however, we should consider a blended education both online and offline to be flexible in maintaining the quality education and to offer more choices for learners in demand no matter where they are.

7. Conclusion

The 4.0 Industrial Revolution has changed almost every aspect of human life, especially education. The e-learning trends is probably our future choices for the university education because of its development and practical applications. Though we still have some obstacles from available technology, e-learning is gradually adapted and improved in formats and quality. The results from actual experience of online learning and teaching at UEH during the COVID-19 pandemic could help educators and learners have a deeper and more detailed look at the e-learning process and possibilities. All the suggested recommendations from the research could be considered and modified to help improve the effectiveness of the e-learning system at UEH.

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