

ELEARNING TEACHERS' AND STUDENTS' PERCEPTION TOWARD LIVE-VIDEO CONFERENCE IN AN ELEARNING ENVIRONMENT

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Abstract: *In an online learning environment, the majority of teaching and learning are conducted asynchronous communication methods. The tools such as the learning management system, web forum, social media, e-mail, and others are example of such tools. In order to ensure that students can access to the instructors as well as classmates as in traditional learning method, a synchronous communication means should be included as part of teaching and learning. In modern digital technology, examples of services and softwares that allow people to communicate synchronously are FaceTime, Skype, LINE, Google Hangout, and others. Not only that people can communicate via voice but they can also see each other as well. Thus, the utilization of video conference software can be a part of teaching and learning in online education. In Thailand, the online education degrees is in developing stages and the utilization of the live video conference along with the standard communication mode is getting more well utilized. Thus, it is necessary to investigate the behavior of past usages and the way that the live video conference mode is utilized into the online learning in Thailand. This research aims to investigate the nature of usages of the Live Video conference features in order to provide a bigger picture of how the system is being utilized by the students and the teachers so that the method of usages can be further study to ensure the effectiveness of the usages as well as implementation of the system in an online learning environment.*

Keywords: *Video Conference, Synchronous Communication, eLearning, Online learning*

1. INTRODUCTION

An interaction among classmates and teachers is a necessary element that can promote learning in any classroom. In traditional classroom, asking and answering questions, presentation, and lectures are some of the interactions occur in classroom. In an online learning environment, majority of interaction occur through Learning Management System via class forum, messages, or live chats. Most of the interactions are asynchronous since students and teachers are not always presence at the same time. Thus, posting messages and waiting for responses is appropriate. One of an online learning program in Thailand utilized such method for teaching and learning. However, the program also employs a synchronous communication channel to supplements the Learning Management System (Moodle). The video- conference service is utilized along with the learning management system throughout the semester. The video-conference can be used in various modes by the course instructor and by students. The availability of the video-conference allows teachers to provide similar teaching/learning experience as in normal classroom as well as giving students additional interaction channel that they can request to use for additional meeting or tutorial session as needed.

1.1 Background of the eLearning System

The current eLearning system utilized at the program is the Moodle learning management system. The learning management design is customized the header and colours. The lecture is provided via a pre-recorded lecture along with the accompanied materials such as the printable format of the lectures' slides or readings. The audio version of the lecture is available for all units to download for off-line learning.

In the LMS, students can interact with classmates and the course instructor via class forum or the chats. However, the live chat in the LMS was almost never utilized by any course. Majority of the interactions are via the forum or the private messages. The instructors' e-mail, phone, and other social network information are available for students to contact the instructors. The students can also access through friends' email. For other social network information, the students are exchanging the information privately outside of the LMS.

1.2 Live Video Conference Usages in eLearning

Prior to acquiring the WebEx, the online video conference available as a free services through Google Plus, Skype, FaceTime, and other similar services were utilized individually by a course instructor as an additional communication channel to the existing eLearning system. However, the usages were not always reliable and may require students to register an additional account to the services. Furthermore, there was no recording services available that allow the meeting session to be recorded for later reviews.

The WebEx services were acquired to the program to provide standardized services for all instructors and students so that the video conferencing can be conducted by all instructors without the need for additional technical knowledge with various system. Furthermore, utilizing only one type of video conference system can help the program provide support for all instructors easier. The WebEx system allows users to participate in a video-conference through various operating system including Windows OS, Mac OS, platform including mobile operating systems such as Androids and iOS. The overall usages recommendation and features of WebEx can help increase interactions, integrate with the LMS, share document through whiteboard, promote active learning, and help learners connect online (WebEx, 2014). The usages of WebEx in education can promote the interaction between students to students or students to teachers, as well as promoting the collaborative learning online. The online meeting can help reduce the traveling expense and time of meeting as well (Macaulay, L., & Dyer, L. T., 2010).

The WebEx service has been utilized for almost 3 years at the program already. Thus, it is important that the study to explore the usages is conducted to explore the usages and perception of the service in order to improve and provide recommendation to other eLearnign courses that may not fully utilize the WebEx services into teaching.

1.3 Research Objectives

The objectives of the investigation are:

1. To explore the faculty members and the students at an eLearning academic programs usages behaviors of the video-conference (WebEx) system provided by the school.

2. To gather information regarding the problems/issues that the faculty members and the students experiences during the usages as well as any recommendation for further improvement.

2. METHODOLOGY

The purpose of the the study is to explore the perception of faculty members and students who had experience using WebEx as part of the teaching/learning. The qualitative data collection method is chosen to provide participants with open-ended questions that participants were free to answer without restrictions on answer. To collect data, a set of open-ended questions were developed and distributed to faculty members and students who were chosen to be part of the study.

There were four (4) questions included in the study.

1. Can you describe how do you use the GSeL video Conference (WebEx)?
2. Comparing with a live face-to-face meeting, please provide your view on the advantages and disadvantages of the GSeL video conference (WebEx) ?
 - In your opinion, what are advantages of GSeL video conference (WebEx) session?
 - In your opinion, what are disadvantages of the GSeL video conference (WebEx)?
3. In your opinion, what do you think can be improved on the GSeL video conference (WebEx) usages?
4. When using the GSeL video conference, what are problems that you encountered while using the video conference (WebEx)

2.1 Samples

The eLearning program in the study is an eLearning programs at the Master's and Ph.D. levels at a University in Thailand. All of the programs are provided in eLearning mode. Students are studying through Learning management system. However, not all of the courses integrate the WebEx into teaching and learning. Thus, not all faculty members and students have extensive experience with using the WebEx.

The samples in the study were voluntarily recruited from faculty members who utilized the most video conference usages. For the students, the online open-ended questions were distributed to students who studied and used the video-conference in the past. There were 4 faculty members and 6 students providing the answer to the questions. Although the number of participants were low, however, they had experience with the system and were willing to provide the information to the questions. Thus, their answers should provide sufficient view into the overall usages of the system and guidance for future improvement.

2.2 Results

After data were collected, the data were coded and similar answers were categorized. The results from the faculty members were as follow

2.3 Faculty Members

The faculty reported the usage of the video-conference (WebEx) system showed the following results for each question.

WebEx Usages

The faculty reported that the WebEx usages were for the class and the advising students. A faculty member also reported that the WebEx integration is a part of students' work presentation and for tutorials. Furthermore, the WebEx was also utilized as the channel for class discussion in a seminar course.

Advantages and Disadvantages of WebEx

The report of the advantages of the video-conference over the regular face-to-face meeting was reported as better at time management and the need for the WebEx as part of an eLearning program. As one of the faculty reported that

"WebEx provides more control over conference. Also F2F meeting are not necessary as ALL programs are advertised as an eLearning programs. More efforts should be put in hardening WebEx for widespread use at GSeL. A free and short VDO training course about how to use WebEX should be part of every program."

The disadvantages of the WebEx were reported as the potential for the Internet disconnection during the meeting and the cost of the WebEx.

Future Improvement Recommendation

Faculty members recommended that the system should be applied to all aspects of the program management including the interview and other events.

"It should be used for all purposes- starting from the interview and admission process to final defense and graduation. There is no need to ask students enrolled in a so called eLearning program to come to Huamak or Bagna Campus."

Issues with Using WebEx

All faculty reported that the issue with using the video-conference was the stability of the Internet connection. One faculty member reported that the testing of the system with students will also be helpful.

2.4 Students

WebEx Usages

The students reported that they used the video-conference for the following tasks: meeting, presenting work, class discussion, group discussion, and sharing ideas with others. One student reported that the system “Very convenient. One of the best way of learning/ meeting/ presenting presentation I've experienced.”

Advantages and Disadvantages of WebEx

The following are reports from students regarding the advantages of the video-conference (WebEx) provided at the school.

- I think its screen sharing and whiteboard features are better than other application as we can choose to display both the screen and our face. If I'm not wrong, it also comes with recording feature which is also very useful for future reference.
- Advantages of using WebEx are easy to connect and save times, money
- 1. Can work anywhere that Internet is reachable 2. More convenience to share documents on screen 3. Save time on traveling 4. Meetings can be recorded and review later
- Reliable, well-controlled, recording, access upon receiving link
- An easy and effective way of interaction in distance

Based on the report, it seems that students see the WebEx as advantages on the convenience of the meeting and features as well as the availability of recording that can be review at later time.

For the disadvantages of the WebEx, the students reported as follow.

- Its expensive
- The problem of the devices or the strength of internet connection that sometimes the user is unable to control.
- 1. Connection problem (sometimes) 2. Voice quality problem (sometimes, too low and static noise) 3. Not lively 4. The surrounded environment heard from other
- The interface was not familiar initially
- Sometimes there are technical problem and internet connection.
- Limited opportunity to interact Problems with meeting time

Most of the disadvantages reported by students showed that the problem with the Internet connection is the main issue along with the quality of the voice or noise from environment. Also, there was a report on the meeting time.

Future Improvement Recommendation

Majority of students reported that there was no need for improvement on the system. There was one student that mentioned about the improvement of the sound quality and added features in the system. One student mentioned that the meeting time is the improvement that is needed.

Issues with Using WebEx

The issues of using the system that students mentioned are the quality of the video and the audio as well as the issues of having slow internet connection. One student mentioned that sometimes he felt bored when there were more than two participants in the meeting.

3. DISCUSSION AND RECOMMENDATION

Based on the report of the WebEx usages by the faculty members and students in an eLearning program. The video-conference service has been utilized to support the teaching and learning and also provide students with an effective teaching method. The usages of the WebEx by faculty members can be for advising, tutorial, discussion, and work presentation. For students, the usages of the WebEx was convenient and effective for the discussion and presentation. Thus, the implementation of the WebEx as a support communication channel showed effective usages by the faculty members and students.

Regarding the advantages and disadvantages of the video-conference system and the face-to-face classroom, faculty members and students were not report any major disadvantages nor reported strongly negative opinions toward its usages. This may due to the fact that the students were studying in an eLearning program, in which the majority of the interaction were through the asynchronous mode such as forum and e-mail. As a result, a live communication channel is perceived as a welcome addition to supplement the teaching and learning.

For the improvement of the current system and the issues, the main issues that the faculty members and students encounter during the usages were due to the instability of the Internet connection. The issue can also lead to the problem with the quality of the audio and the video during the usages. The reported technical issues might be caused by several factors, which could not be easily modified since the internet connection is provided by the external service providers. For the quality of the audio and the noise issue, the users can also learn to manage the audio quality on the computer or smartphone. Furthermore, users can also select environment that have minimum noise during the video-conference to reduce the noise level.

A notable report by students that mention that the meeting time is an issue could reflect the nature of the students in the eLearning program. In the program, there are students from different countries enrol. As a result, the meeting time can be difficult because the time differences. To solve the issue, the faculty members may need to ensure that all students can meet at the time that all of them are available. One of the course that used the WebEx the most in the school use the WebEx for the class discussion at a time that is at night or outside of the normal business hours to ensure that students who are working can participate as well. However, many of the meeting time that were held during the normal working hours, students may have to compromise their working time to participate.

The issue of cost of the acquiring the current video-conference system (WebEx) was also reported by faculty member and students. In the year of the study, 2017, there are several alternatives of the video conference that can be acquired without cost. The system such as

Google hangouts, Skype, FaceTime, or others can provide similar services. However, for institutions, the services that allow for custom branding, recording, sharing document, and other features are still required some form of subscription services with different pricing. Currently, the WebEx system and pricing are suitable for the features and usages at the school. For other institution, it might be worth comparing the features and pricing as well as the usages requirements prior to investing in the system.

4. CONCLUSION

In an eLearning education, in which the majority of teaching and learning are asynchronous communication, implementing a live video-conference can be an additional communication channel that supplements the teaching and learning well. The live video conference allow the instructors and students to use different teaching method such as advising, tutorial, discussion, work presentation through the Internet. The utilization can provide students with positive learning experience. Although certain technical difficulties may prevent the full quality of the video-conference, the quality of the Internet and the training of the system usages can improve or reduce the potential issue. Lastly, the plan for meeting and the scheduling strategies can also be helpful to ensure that all students can meet at the time that is suitable. The knowledge gather in the current study can provide for a more systematic study and survey that can be distributed to more people to further analyzed the usage behaviors and perception for further improvement of the video-conference system.

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