A Review of Blended Synchronous Learning

Ho Wan Yu
National Institute of Education

Dr. Wang Qiyun
Learning Sciences & Technologies
National Institute of Education

ABSTRACT

This paper reviews the main benefits and challenges teachers, students and institutes may face while using blended synchronous learning and some possible strategies to overcome them. This paper also looks at the main factors to consider for designing effective blended synchronous learning. For example, having common display across all users, choosing a suitable platform and features, modes of blended synchronous learning. Strategies like: enhancing students’ and teachers’ e-learning competence, explaining the structure of the course to students, teachers’ preparation and delivery of lessons and support from various parties, can be used to effectively carry out blended synchronous learning.

INTRODUCTION

As technologies advance, there have been research studies on how technologies can be used to help and improve teaching methods, as well as help remote students receive an equivalent education as their on-campus classmates. To date, asynchronous activities and resources like sharing of documents online, recorded online lectures, provided within a learning management system (LMS) has helped support learning for remote students. However, these may not be sufficient when students are needed to engage in real-time conversations or discussions where they have to share information rapidly or when presence and community are essential in learning. This is where rich-media, real-time communication tools, video and web conferencing come in. These rich-media real-time technologies enable teachers to engage both remote and on-campus students in the same “live” experience through blended synchronous learning approaches (Bower, Kenney, Dalgarno, Lee & Kennedy, 2015).

Many academics have defined blended synchronous learning as a means of simultaneously engaging remote and face-to-face students in the same live experience using rich-media real-time technologies (Bower, Kenney, Dalgarno, Lee & Kennedy, 2014). Blended synchronous learning can also be known as hybrid learning (courses) or distance learning platform. Although there are different definitions of blended learning, most of them encompass the idea of integrating different instructional ideas (traditional face-to-face learning and online learning) (Alammary, Sheard & Carbone, 2014). In this article, we define blended synchronous learning as a learning approach by which students take part in the same activity and lessons at the same time but at different sites. Some students are in the classroom and others are at multiple sites but take the same lesson, via video conferencing (real time) technology.

There is no doubt that blended synchronous learning can bring about many benefits but there are also downsides and challenges that has to be overcome, in order to successfully carry out the lessons such that it is beneficial to the students. The purpose of this review is to identify...
the benefits and challenges of blended synchronous learning as well as to look at the critical factors to consider, strategies to effectively carry out blended synchronous learning and strategies to address the issues/challenges or methods to prevent them.

A blended synchronous learning environment involves four main parties: Teachers conducting the lesson, face-to-face students, remote students, and the institutes. This paper will include various research studies and study results on blended synchronous learning, conducted by various institutions from different parts of the world.

METHOD

Searching and selection procedure

The articles used in this paper, are gathered through NIE’s Library and Information Services Centre (LIBRIS), which allows access to a large electronic databases including: ScienceDirect, ERIC, Education Source and PsycINFO.

When the research first began, I searched for academic journals, articles and other literature reviews using general search terms like “blended synchronous learning” to learn more about this topic and find out more on the different meanings and existing models. I then moved on to search for more information, but still in broad terms, example, “benefits/ challenges of blended synchronous learning” and “designing blended synchronous learning environment”.

Most of the articles found are research studies that are conducted by various institutes from different countries who tested out blended synchronous learning through different modules and levels. The articles highlight the findings as well as positive and negative responds from the participants.

While reading through the articles, if there were areas that could be explored or needs to be explored, I would look up the appendix/ reference list for the original article, to read further and find out more. I then focused on a few articles that contain what I was researching on. Since not all articles are relevant, I would read the abstracts of the articles and skim through the article to see if they would help in the research. Also, priority is given to articles that are published over the last 6 years.

Since there can be more than one research topic in a research paper, I would note down the main findings and topic before moving on to the next article. While reading the other articles, I would continue examining and note down the common or new findings. Although the research studies are very diverse as they are from various institutes, levels as well as subjects, common themes and results can be seen.

In an educational environment, and implementation of an blended synchronous learning environment, the essential parties and components are the students, teachers, institutional support as well as technology. Therefore, in the following sections, the findings will be presented into these 4 categories.

1. Benefits of using Blended Synchronous Learning

Through the articles and research studies read, there are a few most common benefits of using blended synchronous learning.

1.1 Benefits for Students

1.1.1 Flexibility and convenience

Blended learning has been evolving in demographics (returning students, single parents, young adults, international students and students with disabilities or learning disabilities) as more people saw
the convenience these types of platforms can bring (Barker, 2015). For example, in rural areas, students may have difficulties commuting to schools, and blended learning provides an opportunity for them to learn from homes, instead of having to drop out of school or give up on their education entirely.

Learners can range from different ages and be in different stages of their lives when they are schooling. Some may be typical students of young age while some are working adults or parents who may have more trouble commuting to and from school on a daily basis. As such, schools need to continue developing their education systems in order to support the changing needs of students. Hybrid classes like blended learning, provides a platform for students to complete their studies while also coping with their own responsibilities on their scarce time and resources (Barker, 2015).

With these online platforms, students can have more flexibility as they can log on from a location and at a time that they are more convenient in. Also, by conducting lessons online does not only benefit those who need this option for convenience or flexibility but can also benefit those who simply prefers to learn from home (Woodcock, Sisco & Eady, 2015).

1.1.1 Increase in self-efficacy

Online platforms that allow anonymity may increase student’s self-efficacy, as they are in a psychologically safe environment. An environment that is judgment-free, can make them feel more confident to pose questions and share ideas (Woodcock et al., 2015). This can allow students to be more vocal or willing to participate in class discussions and activities.

1.2 Benefits for teachers

1.2.1 Greater flexibility in arrangement of classes

With blended synchronous learning methods, teachers will not have to reschedule or cancel lessons even when they are off-campus, for conferences or meetings. They will still be able to conduct their lessons in a cyber-classroom, while their students can be in the physical or cyber classroom (Hastie, Hung, Chen & Kinshuk, 2010).

1.2.2 Potential to decrease workload through collaborative teaching

A teacher’s workload my decrease if institutes are to collaborate with other institutes to deliver lectures or programs. The institutes can be linked via the Internet and the lesson can be broadcasted to various classes. In this way, teachers will not have to repeat the lessons and teachers from both institutes can take turns to deliver lectures, therefore, having the potential to decrease one’s workload (Hastie et al., 2010).

1.2.3 Conducting lessons related to sensitive topics

Blended synchronous learning is not only useful for students who are unable to attend lessons physically but also beneficial when teachers are needed to talk about sensitive topics that students may be uncomfortable or find it confronting to discuss about in the physical classrooms.

For example, the Blackboard Collaborate web conferencing system was used to conduct a lecture discussion with sexology students at Curtin University. As some students may find it confronting to talk about their personal experiences, being in a blended synchronous environment, teachers can create a safe atmosphere for every student to take part. By doing a real-time web conference with the students in the face-to-face classroom can also foster a more embodied participation from remote
students during lectures (Bower et al., 2015).

1.3 Benefits for institutes

1.3.1 To meet demands of increase in student population

As the student population increases, schools may have inadequate physical facilities to accommodate and meet the increase in demands. By using simultaneous instruction, schools will be able to increase the total number of students enrolled in a traditional class while not taking up space in a physical classroom (White, Ramirez, Smith & Plonowski, 2010).

1.3.2 Alternate way to deliver lessons

With possible epidemics or situations like haze or SARS, schools may need alternate ways to continue delivering lessons to its students (White et al., 2010).

By using blended synchronous learning approaches, schools will be able to solve this issue as it is possible to simulate the experience of a real classroom setting by implementing blended synchronous learning. It enables students who are unable to attend classes physically, to experience lessons, ask and answer questions, and engage in lessons just like on-campus students. These lessons can also be archived or uploaded on their systems for students to review the lessons whenever they need to.

2. Challenges and strategies to address them

Listed are some challenges the different parties may face as well as technological difficulties that may occur during lessons, as well as some possible strategies to prevent/address them.

2.1 Students

2.1.1 Students’ discipline and responsibilities

When students have their lessons online, the responsibility falls on students themselves (Lei & Gupta, 2010) and they have to have the discipline to set aside time to prepare their work and complete any required work or assignments (Barker, 2015). Participants in a study by Durak and Ataizi (2016) responded that motivation could be lowered due to complacency as teachers are not physically by their side to monitor them.

Before the start of lessons, students are expected to have taken the initiative to download the materials online, test run their software (Warden et al., 2013) and equipment like camera, microphone settings as it may result in a disruption during lessons if they are not properly adjusted (Durak & Ataizi, 2016).

Strategies

Students can be motivated if teachers are able to see students’ data logs (i.e. what courses have they completed) and attendance. In this way, students will put in more effort and therefore become more disciplined to complete the work given.

It is also a personal responsibility for each student to check his or her own equipment, making it difficult to overcome at the class level. Students must therefore be responsible for their own learning and do the pre-checks and set-up beforehand to ensure that lessons can run smoothly, minimizing the disruptions to other students.

2.1.2 High perceived complexity

When new ideas or platforms are introduced, users may perceive them to be less manageable due to its complexity. Having low complexity means the
technology is better defined and poses high-perceived control, low risk, and high predictability to the user (Tabak & Rampal, 2014). In blended synchronous learning, a new pedagogical tool is introduced, resulting in a change of the students’ routine and their usual traditional classroom settings. Therefore, the perceived complexity can be high for the parties who are introduced to blended synchronous learning for the first time.

**Strategies**

Teachers can try to reduce the complexity, let students be more comfortable and gain familiarity with the technology by holding a few sessions of introductory sessions for the students. Demonstrations and introductory classes can be held offline, in physical classes to demonstrate how the software or technology can be used, before students start using them. Pre-training can also allow learners to better understand the features so that their interaction with the instructor or peers can be enhanced (Kuo et al., 2014).

It is best that teachers make it clear to students what is needed on their computer and what is needed to access the software that will be used during the lesson. Also, before the scheduled lessons, teachers can encourage and remind students to carry out trouble shooting to prevent any possible issues during the delivery of lesson. A list of items to check for should also be passed to students, to enhance their perceptions of control and lower their perceptions of complexity (Tabak & Rampal, 2014).

**2.2 Teachers**

**2.2.1 Potential increase in teaching demands**

Since conducting blended synchronous learning involves more preparation work and various technologies, teachers’ workload is bound to increase. During lessons, teachers will have to be conscious of their movement as it may affect the video-feed recorded. Teachers will also have to take note of their teaching pace as it is needed for teachers to be speaking at a measured pace such that clear audio can be transmitted to students who are online. The study conducted by Bower et al. (2014) implies that it is also necessary that teachers distribute their attention to both face-to-face and remote students to prevent them from feeling any biasness or unfairness and one way to accomplish this is to circulate among both cohorts to help them or to ensure that they are on task.

**Strategies**

A teacher assistant or support can greatly help the teacher conducting the lesson, as an assistant can provide operational assistance to ensure that remote students are receiving all communication and discussions from the teacher (Bower et al., 2014), so that the teacher can focus on conducting the lesson.

**2.3 Challenges faced by Institutes**

**2.3.1 Time needed for set-up**

Due to the various technology and equipment demands needed to conduct the lesson, it may be a concern that the setting up of equipment may take up curriculum time.

**Strategies**

To counter this issue, classrooms with stationary and permanent equipment like a laptop, projector, and sound systems should be chosen. By having access to these facilities for lessons, can greatly reduce setup time and possible technical issues (White et al, 2010).

**2.3.2 Difficulties in implementation in institutes in rural areas**

Although one of the benefits and ideal goal of blended synchronous learning is to
provide education to people all around the world, but there are still rural areas that does not have the proper facilities and infrastructure needed to develop a new learning environment. Not only that, some areas high illiteracy rates also pose a problem on whether it would be appropriate or effective to implement a new learning model.

One example is a study by Sanabria, Chavez and Zermeno (2016) in a school in Chocó (department in Columbia), which reported that only 30% of the educational institutes have Internet access, as there is only one Internet provider and some areas lack electricity service. Also, having technology does not solve the problems of information access in remote communities immediately. People must utilize them before it becomes a benevolent tool for education and a pedagogical model should also be developed based on the needs and profile of students to improve their education quality (Sanabria et al., 2016).

**Strategies**

Before institutes can start to adapt or implement online education into their original system, they should meet the following criteria: Training teachers for the use of technologies, improving school facilities and infrastructure and develop curriculum guidelines that support the teaching. The institute will have to put in the effort to conduct studies to work out an appropriate online program based on their financials and what is currently available. The institute is also obliged to improve on technology investments and provide students with the facilities to enable them to grow in the use of technologies and communication (Sanabria et al., 2016).

### 2.4 Technical issues

#### 2.4.1 Sound quality and disruption

Sound quality during video conferencing can dramatically disrupt interaction with and among students. Since synchronous video’s greatest demand is bandwidth, audio quality will fall with the bandwidth at both the user-side and server-side (C.A Warden, Stanworth, Ren & A.R.Warden, 2013). The worst case scenario will be that the student is disconnected from the class, and is unable to alert the teacher that he/she is facing an issue. It will also be impossible to reach out to them since they are unable to receive any audio on their end as well.

**Strategies**

One possible solution to this would be to provide an alternative channel for communication like, live-texting chat box, for students who face audio problems as well as an avenue to share teaching materials in real-time (e.g. links to websites). By adding a live chat box can also increase feelings of a common class (Warden et al., 2013). Students should also test out their equipment and system before lessons, so that they can resolve any issues quickly for the lesson to run smoothly.

Teachers or instructors can also help students manage technical difficulties by conducting pre-training sessions before actual lessons. During the sessions, when technical issues pop up in real-time in front of the students, teachers can more effectively run through the trouble shooting steps alongside them instead of simply giving written instructions (Warden et al., 2013). With hands-on experiences with the teacher, students may be able to better handle technical issues when they are off campus in future sessions.

#### 2.4.2 Internet connection

Although online learning can bring about a lot of convenience, it is highly dependent on individual’s Internet connection. When the user has unstable Internet connection, or when the network system is down, it can be very disruptive to both the student
as well as other students online. If students are continuously disconnected from the session, they will miss out important information and the teacher may have to stop the lesson and wait for the student to get reconnected. Large documents and video files can also be affected by the connectivity, and online problems and errors and reduce user confidence (Woodcock et al., 2015).

Strategies

To prevent connectivity problems caused by downloading of large files, documents needed should be uploaded online before the lessons for students to download, to reduce the disturbance as well as waiting time during the lesson. Students will also have to take up the responsibility to download the files before the sessions so that they do not have to spend time to download them when the lesson is running.

3. Factors to consider for designing effective blended synchronous learning

Designing a blended learning environment or any programme requires a lot of effort, studies, and feedback from various parties to make it work. Different courses also have different requirements that are necessary for the lessons. Variations also exist due to various factors like: student characteristics, instructor expertise, teaching style, course objectives and resources available online (Alammary et al., 2014). For example, in collaborative lessons, it is essential for students to be able to communicate verbally with each other in small groups, which may not be necessary if it is a lesson where the lecturer is delivering the lesson.

Listed are some factors that should be considered or looked into when designing an effective blended lesson:

3.1 Common display across all users

If slides are synchronous across all users to view, it will improve lecture delivery, as teachers will not face problems like students being on the wrong slide or in cases where students have not downloaded the slides. The common display also improves opportunities for constructing a shared learning space, even though they are not physically at the same space (Warden et al., 2013).

3.2 Choosing of platforms and features

With the development of technology, there has been an increase of software and platforms that are available on the market. Therefore, it is essential to determine the software’s feasibility by its capability as well as the number of participants using the software (White et al., 2010) since students’ learning experience would differ with the type of technology tools utilized in distance learning (Y.C. Kuo, Walker, Belland, Schroder & Y.T. Kuo, 2014). As different students possess different degree of computer literacy, the platform chosen should be user friendly and relatively simple for the targeted student group such that the technology will not be a hindrance to students’ learning and they can focus on the lessons. Different platforms are also chosen depending on the type of lesson: learner-instructor interaction (lectures), learner-learner interaction (student collaboration projects) or learner-content. For example, if students are required to collaborate, features like having breakout rooms and group chats will be necessary.

After deciding on the software, the team will have to decide on the features to be used. Features can be eye-catching and appealing, but considerations and trials have to be carried out to determine if it brings benefit to the delivery of lessons. Teachers who are already busy facilitating learning activities and monitoring
technical issues may experience multitasking overload if they have to handle the new features and also help students with the features (Warden et al., 2013).

3.3 Modes of blended synchronous learning

There are various ways blended synchronous learning can be conducted and Hastie et al (2010) came up with 9 possible modes to conduct blended synchronous learning (Appendix 1), where the letter “T” represents teachers and “S” representing students.

The different modes are useful in different types of lessons and subjects. For example, in mode 2, sessions can consist of either one teacher or a group of teachers working as a team for collaborative demonstrations for students online. Students can participate in live lessons/courses via the Internet based on pre-schedule time slots. If teachers are conducting lessons that requires demonstrations or viewing of sites, teachers can choose mode 8, where a teacher will be teaching in an online environment while linking other teachers in external (physical) venues to provide live streams back to the cyber classroom.

Depending on the course or subject’s needs, teachers will have to choose the appropriate mode to effectively make use of the blended synchronous methods to enhance their teaching.

4. Strategies to effectively carry out blended synchronous learning

4.1 Enhancing students’ and teachers’ E-learning competence

In a study by Woodcock et al. (2015) where 53 pre-serviced teachers were surveyed after going through a course using online synchronous environment, theorize that a teachers’ competence to learn and teach through online platforms is dependent on four conditions: primary conditions- ease of use, psychologically safe environment, secondary conditions- e-learning efficacy as well as competency. The fundamental for an online platform to be successful, the conditions must be met sequentially so enhance one’s e-learning competence.

4.1.1 Ease of use

Both students and teachers have the mindset that online synchronous platforms are hard to learn and teach. Therefore it is important that the platform chosen is easy to use so that both students and teachers are not over-whelmed by the technology. If students are comfortable and are able to use the platform with ease, they can eventually be more efficient and competent in their abilities (Woodcock et al., 2015).

When the users’ (teachers and students) perceived ease of use is decreased, they will be more accepting and willing to use the platforms. Therefore, it is essential for teachers to try, reduce the perception of complexity in students.

4.1.2 Psychologically safe environment

Students’ e-learning efficacy and experience can be enhanced when they feel psychologically safe. Teachers can do this by building a learning environment that has clear expectations, trust, care, closeness, cohesion, mutual respect and a democratic space of equals (Woodcock et al., 2015).

4.1.3 E-learning Self-efficacy

Studies by Woodcock et al. (2015) and Woldab (2014) stated that self-efficacy depends on one’s learning experiences and if the primary conditions (ease of use and environment) are achieved, the secondary
conditions can be fulfilled more easily. In the study, through participating and asking questions to clarify their understanding anonymously and being able to join the class from a comfortable and safe environment, allowed their e-learning self-efficacy to their ability to increase.

4.1.4 Competence

As blended synchronous learning is relatively new to many students, and even teachers, other than enhancing students’ e-learning competence, it is also necessary for teachers to prepare themselves and students in other ways to effectively carry out the lessons, especially in today’s classroom where ICT skills are needed to provide a better learning experience and troubleshoot technology problems when they occur (Bower et al., 2014).

When exposed to new technology or teaching methods, teachers must first believe that they are capable of teaching effectively. If teachers are equipped with e-learning competency, they can also better prepare their lessons and materials to better carry out their lesson to the students. It is important that teachers are trained in the integration of ICT planning classroom, as they are influential in the formation of students (Sanabria et al., 2016). It is best that teachers go through professional developments to learn about the new technologies and skills available to better choose the appropriate platform to better achieve their objectives for the course (Alammary et al., 2014). If teachers themselves are not familiar in using the platform, they would not be able to help their students during the learning process and when problem arises.

4.2 Students to understand the structure of the course

Effective implementation includes students being familiar with the lesson structure and learning environment. Therefore it is essential that all parties involved are comfortable with the structure, format and technology of the class before fully implementing it. Since students are one of the main users of the new pedagogical tool, it is necessary that the benefits of the tool are conveyed to them and to clarify any points of confusion. The course syllabus, explanation about the tools, how is it going to be implemented and how students performance will be assessed, should be conveyed as well so that they are clear and prepared (Tabak & Rampal, 2014).

4.3 Teachers’ preparation and delivery

Teachers are the main instructor in classrooms and should be prepared before lessons, be it lesson planning beforehand or back-up plans if technologies fail.

Before lessons, it would be very helpful for teachers to send out instructions needed for the lesson beforehand, to avoid repetitions, as two different sets of instructions may be needed for the two cohorts of students (in-class and online students) (Bower et al., 2014). By sending out instructions and course contents before hand can also enable students to download them before lessons, so that time is not wasted during lesson.

A study by Woodcock et al. (2015) shows that it is harder to be engaged when learning online and that it depended greatly on the presenter’s ability to engage and deliver the lesson. If the teacher is unable to engage remote students, they may end up losing focus. Therefore, a teacher’s role and direction is very crucial in various situations. Teachers can try to present in an animated and humorous manner, encourage remote students to take part in class discussions or to share their comments. One way to do it is to prompt for responses, explicitly call out students’ names and to direct them to a particular
question or activity (Bower et al., 2014).

Teachers also have to have backup plans planned out, in case of technical issues that require immediate attention. They will have to remain their composure and decide on how to react to the situation, minimizing disruptions (Bower et al., 2014).

4.4 Support from various parties

Although blended synchronous learning has been implemented in many institutes all over the world, it can still be new and daunting to many teachers, especially teachers who are new and have low or no experiences. A study by Alammary et al. (2014) has emphasized multiple times that the presence of educational designers can be very helpful in the designing stage of the blended synchronous learning course as they have better knowledge of the range of technologies available and pros and cons for each of them. After implementation, they can also help review the course and give feedback on how the course can be improved.

During lessons, having a teaching assistant or support staff in the virtual environment is essential component (Bower et al., 2014; White et al., 2010), especially when the teaching assistant has knowledge of the course content and technology (White et al., 2010). In this way, the assistant will be able to help students with both technical and content issues or questions students have immediately, without disrupting the lesson.

As students are learning through new methods, having technical support is also essential to support students’ learning so that they can feel more comfortable and confident when using the platform (Woodcock et al., 2015). It is also essential to have the support from the institute, as it would not be possible for teachers to try out and experiment different approaches if there is no support given.

CONCLUSION

The purpose of this paper is to explore and examine articles and research studies published which focus on the various aspects of blended synchronous learning, and an attempt to give a summary of their results.

The main benefits are that blended synchronous learning brings greater flexibility and convenience for students as well as increasing their self-efficacy. It also benefits teachers as they can have greater flexibility in arranging classes. There is also a potential to decrease their workload if they engage in co-teaching and they may be able to better conduct lessons related to sensitive topics in a safe environment. Institutes can also better meet demands of increase in student population and provide students alternate ways to deliver lessons, allowing them to continue with lessons even when students are not able to attend classes physically. On the flip side, students need to have discipline and responsibility to complete the tasks given and teachers have to help decrease their perceptions of complexity. There is also a potential that teachers’ teaching demands may increase as they will need to pick up new skills required to conduct the blended synchronous lessons as well as spend time developing lesson plans. Institutes will need to invest time and effort to set-up the required facilities and technology. They will also need to be aware and prepared for technical issues like a drop in sound quality and unstable Internet connection may also cause disruptions to the lessons.

The main factors to consider for designing effective blended synchronous learning are: having common display across all users, and choosing a suitable platform and features and modes of blended
synchronous learning. Blended synchronous learning can be more effective if students’ and teachers’ e-learning competence is enhanced. If students understand the direction and structure of the courses, teachers’ preparation and delivery of lessons and support from various parties, can also help make the lessons more effective.

Overall, many of the research studies have mentioned that although blended synchronous learning or other online lessons has its benefits, online learning should be complementary to face-to-face teaching and not totally replace traditional classrooms (Woodcock et al., 2015; Poon, 2013), so that the richness of interaction, such as nonverbal cues would not be lost (Tabak & Rampal, 2014).

The decision to start a synchronous learning course is not easy as it requires intensive long-term planning, observation and evaluation for the course to be successful, and even after implementation, they will need to gather feedback, review and evaluate their methods to make improvements. Teachers also need to take note that the type of software and methods of teaching differs depending on content and subject. So teachers must be prepared and willing to dedicate time and effort into it (Alammary et al., 2014). Support from the institute is essential, as they will be the ones to provide most of the support that are important for online platforms to be successful, for example: technical support and sending teachers for professional developments so that teachers can better lead students in blended lessons (Warden et al., 2013) as well as to improve one’s Internet self-efficacy (Woodcock et al., 2015).

Although many schools are moving towards online learning but there are some students who may still hold on to their traditional learning habits, as they prefer face-to-face interactions and being physically close in a classroom environment (Durak & Ataizi, 2016). Some schools may also stick to traditional teaching methods as they do not have the facilities needed or because teachers lack experiences and confidence in online teaching.

Although there are various ways to choose a blended synchronous learning model, and are on-going research studies looking for a more effective model to improve the education system, the main objective is still to put learner’s needs in mind, improving their learning experience while not making them feel overloaded, in order to build a successful and effective course.

ACKNOWLEDGEMENT
I would like to express my gratitude to Dr Wang Qiyun for his constant guidance and support. Throughout this journey, he has shared with me some valuable and practical knowledge about blended synchronous learning which allowed me to gain a deeper insight on the topic.
Appendix 1:

*Appendix 1: 9 modes to conduct blended learning lessons (Hastie, et al., 2010)*

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