



**INVESTIGATING THE BEHAVIOURAL INTENTION TO ADOPT FLIPPED
LEARNING: A STUDY FROM ESL LECTURERS' PERSPECTIVE**

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UALZ 3023 - FYP2 REPORT

**SUBMITTED IN
PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR BACHELOR OF ARTS (HONS) ENGLISH EDUCATION
FACULTY OF ARTS AND SOCIAL SCIENCE**

MAY TRIMESTER 2022

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A RESEARCH PROJECT

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FACULTY OF ARTS & SOCIAL SCIENCES

UNIVERSITI TUNKU ABDUL RAHMAN

MAY 2022

ACKNOWLEDGEMENTS

The completion of this project would not have been possible without the support of many parties. I would like to express my deepest appreciation to my supervisor, Ms. Kristina a/p Francis, for her invaluable guidance and patience throughout the research. She has provided the opportunity that allows me to explore ideas about my research topic, in which it is important for me to be an independent researcher. I am grateful for her willingness to dedicate time to assisting me with any difficulties I encountered. Thanks should also go to all the ESL lecturers who have participated and contributed to the results of my study.

I am also thankful to my family, especially my parents, for their tolerance and understanding in the course of this project. Their belief in me has given me the strength to thrive in tough times, and it is definitely something that I could not ask for more.

Finally, I would be remiss in not mentioning two of my lovely batchmates, Teh Wei Gee and Lelia Myriam Bong Siu Mien, who have been encouraging me along the way. Many thanks for their kindness, and most importantly, for being my source of motivation in completing my research project.

From the bottom of my heart, I thank everyone who has contributed in some way to making my research journey wonderful. I will be forever grateful.

CHEW ZHI JUN

APPROVAL SHEET

This research paper attached hereto, entitled “Investigating the Behavioural Intention to Adopt Flipped Learning: A Study from ESL Lecturers’ Perspective” prepared and submitted by Chew Zhi Jun in partial fulfilment of the requirements for the Bachelor of Arts (Hons) English Education is hereby accepted.

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ABSTRACT

Following the trend of online learning, flipped learning has increasingly received attention in the educational field, including second language learning. Previous research has mainly focused on the students' perspectives and the effectiveness of the approach. Since instructors are the implementers of flipped learning, this study sought to investigate factors which could affect ESL lecturers' behavioural intentions in adopting the approach. It also explored how ESL lecturers perceive flipped learning. Using UTAUT as the theoretical lens, this mixed-methods research involved questionnaire survey and semi-structured interviews. The sample consisted of 48 ESL lecturers from five different higher education institutions. Results of multiple linear regression analysis showed that performance expectancy and facilitating conditions are factors that significantly influence behavioural intention to adopt flipped learning. The benefits of flipped learning and several issues concerning adoption of the approach were revealed during the interview sessions. The findings provide insight to stakeholders in suggesting ways to encourage the use of flipped learning. Similar research can be done in the future by involving a larger number of participants from different private higher education institutions.

DECLARATION

I declare that the material contained in this paper is the end result of my own hard work and that due acknowledgement has been given in the bibliography and references to ALL sources be they printed, electronical or personal.

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LIST OF ABBREVIATIONS

BI	Behavioural Intention
CLT	Communicative Language Teaching
C-TAM-TPB	Combined TAM and TPB
ED	English Education
EE	Effort Expectancy
EL	English Language
EFL	English as a Foreign Language
ESL	English as a Second Language
FC	Facilitating Conditions
HOTS	Higher order thinking skills
ICT	Information and Communications Technology
IDT	Innovation Diffusion Theory
MM	Motivational Model
MPCU	Model of PC Utilization
PE	Performance Expectancy
Q-Q plot	Quantile-quantile plot
SCT	Social Cognitive Theory
SI	Social Influence
SPSS	Statistics Package for Social Science
TAM	Technology Acceptance Model
TARUC	Tunku Abdul Rahman University College
TESL	Teaching of English as a second language
TPB	Theory of Planned Behaviour

TRA	Theory of Reasoned Action
UTAR	Universiti Tunku Abdul Rahman
UTAUT	Unified Theory of Technology Acceptance and Use of Technology
UTM	Universiti Teknologi Malaysia
VIF	Variance inflation factor

CHAPTER 1

INTRODUCTION

1.0 Introduction

This introductory chapter entails the background of the study which offers an overview of the research topic. In order to delve into the topic about flipped learning, problem statements, research purposes and research questions are presented. Besides, this chapter includes the discussion of the theoretical framework that serves as the basis for the study. It also demonstrates the significance as well as the limitation of the research. Lastly, definitions of certain keywords pertaining to the study are provided.

1.1 Background of study

Due to the current rapid growth of technological advancements, various sectors have been affected including education (Rahman et al., 2019a; Thiruchelvam, 2021). According to Rahman et al. (2019a), students or learners in the 21st century tend to obtain information from the Internet through Google, blogs and videos on YouTube, while communicating with others via social media. It is also stated that social media has become a platform for the students to acquire English vocabulary as well as sentence structures (Shazali et al., 2019, as cited in Rahman et al., 2019a). These imply a change in terms of the students' learning styles, particularly Gen Z and digital natives. The circumstance also challenges the traditional teaching methods, leading to a need for the education institutions and educators to integrate technology as well as different methodologies in the teaching process.

With the intention to accommodate the needs of 21st century education, the Ministry of Education Malaysia has emphasized the significance of Information and Communications Technology (ICT) based learning in the 9th shift section of the Malaysia Education Blueprint for Higher Education (2015-2025) (Rahman et al., 2019b). Today, online learning is a trend as

Covid-19 pandemic forced schools and education institutions to go under lockdown (Farrah & al-Bakry, 2020, as cited in Safiyeh & Farrah, 2020). Educators have increasingly used technological tools and incorporated a variety of teaching methods to make learning interesting and interactive. Undeniably, traditional, teacher-centered methods no longer appear to be relevant, and there is no exception for the teaching and learning of a second language. Referring to Dr Hanita Hassan, head of the Language Academy at Universiti Teknologi Malaysia (UTM), continuous changes can be seen in English language teaching throughout the years. Following the introduction of Communicative Language Teaching (CLT) and the emphasis of higher order thinking skills (HOTS), blended learning was then put forward as a novel learning method (Sani, 2019).

Generally, blended learning is a method that involves face-to-face learning, use of technology and distance learning (Muxtorjonovna, 2020). To be specific, blended learning can be understood as the mixture of formal education online program and learning at a brick-and-mortar setting under supervision (Staker & Horn, 2012). Here, the delivery of content through online provides autonomy to the students to control their own learning time, place as well as the way of learning. In fact, there are four suggested models categorized under blended learning including rotation model, flex model, self-blend model and enriched-virtual model. Rotation model allows students to alternately switch between learning modalities, whereby one of the modalities is online learning. Besides, the flex model entails programs with the Internet as the main channel for content delivery, and students continue learning according to an individually customized schedule. As a matter of fact, students can get face-to-face assistance from the teacher via different activities. For instance, small-group discussion, projects work and individual tutoring. Next, the self-blend model signifies the learning condition in which students take online courses in addition to the traditional courses (Staker & Horn, 2012). Lastly, in the enriched-virtual model, students can manage their time attending physical and online

classes. Since blended learning is available in various forms, educators can select the one that best meets their pedagogical needs (Sulaiman, 2018). More importantly, the selected form of blended learning should match the students' needs and preferences. Among different forms of blended learning, one of the most commonly known in Malaysia would be flipped learning (Rahman et al., 2019a), which is classified under the rotation model.

Flipped learning is an approach whereby students undergo pre-recorded video lessons before class and involve themselves in exercises or practices during class time (Lockwood, 2014, as cited in Safiyeh & Farrah, 2020). The concept was developed in 2007 by Jonathan Bergmann and Aaron Sams, educators from the United States in an attempt to help struggling students who missed out classes because of sports and activities (Sams & Bergmann, 2013, as cited in Rahman et al., 2019b). Instead of spending time getting students caught up in lessons, they used screen capture software to record their live lessons and posted the videos online. Realizing that physical presence of teachers is only needed when students encounter problems, Bergmann and Sams started to replace lectures with activities that could assist students with concepts that they do not understand. This is the way flipped model works by having students watching pre-recorded videos as “homework” and asking questions during physical class. After a year of practicing in their Science class, Bergmann and Sams discovered that the model is more effective than the traditional approach. To clarify, they get to spend more time with their students whereas students work more efficiently in class (Bergmann & Sams, 2012).

In respect of this, Bergmann and Sams (2012) have proposed that using flipped classroom approach would contribute to personalization of education. To put it another way, it serves the needs of different students including those who are struggling, overscheduled and even those who did not manage to engage in deep learning. Soon, flipped learning gained attention of educators worldwide, and it is being practiced in lessons for all curriculum areas.

It is a known fact that Western and Eastern learners have different learning styles due the difference in cultural background. To explain, Western learners tend to be more active and independent as compared to Eastern learners (Wang, 2006, as cited in Chua & Lateef, 2014). This raises the question concerning the suitability of the flipped learning model in Asia. In this sense, studies from nine Asian countries revealed that majority of the university students take a positive stance on the implementation of flipped learning (Chua & Lateef, 2014).

More often than not, many have claimed the numerous benefits of flipped learning. By offering students the content of knowledge beforehand and engaging them with activities in actual class, it supports active and independent learning (Aziz, 2015; Rahman et al., 2019b). As in Malaysia, Dr Malini Eliatamby, vice president of teaching learning innovation from INTI International University & Colleges also posited that flipped learning plays a part in promoting HOTS while providing opportunities for students to collaborate with peers and the instructor. Furthermore, it allows the students to have more time for discussion during class. Not to mention, studies showed that flipped learning is effective in increasing passing rates of the students (Aziz, 2015). In terms of language teaching, researchers Safiyeh and Farrah (2020) discovered that the implementation of flipped learning can help to develop students' English language skills, specifically listening and speaking. This is due to the interactive activities used which could encourage active participation among students. Moreover, a study done by Pudin (2017) claimed that students preferred learning English grammar through flipped classrooms.

Typically, designation of flipped learning that provides autonomy to learners is deemed suitable for education at tertiary level. Yet, there are challenges in adopting the approach especially with lecturers who were used to conventional teaching. Flipped learning approach also requires the instructors to allocate time in preparing video lectures as well as designing activities that cater the needs of the students (Aziz, 2015). Despite the growing importance of technology and the need for a change in education, the precise number of schools and higher

education institutions in Malaysia which are using flipped learning is yet to be known (Rahman et al., 2019a). While studies have revealed students' positive responses towards the use of flipped learning (Pudin, 2017; Zainuddin & Attaran, 2016), it is equally important to examine the attitude of lecturers in adopting the mode of teaching and learning. With this in mind, the Unified Theory of Technology Acceptance and Use of Technology (UTAUT) comes in handy to investigate the behavioural intention of lecturers in implementing flipped learning. Comprising several user acceptance models (Venkatesh et al., 2003), this model plays a significant role in analysing the factors which affect the behavioural intention of English as a Second Language (ESL) lecturers in using flipped learning for teaching and learning. This in turn sheds light on ways in encouraging and increasing the use of flipped learning for ESL teaching among Malaysian higher educational institutions.

1.2 Problem Statement

Low English proficiency among Malaysian students and graduates has always been an issue complained by the employers (Menon, 2017). This problem should not be taken lightly because English is the most frequently used language in society, especially the professional sectors. In order to have a higher chance of getting a job and succeeding at work, it is essential for a graduate to be proficient in English (Kumar, 2020). According to Tazijan et al. (2017), poor communication skills of undergraduates is due to the students' passiveness and lack of verbal communication practice in the class. Bearing this in mind, teaching methods should be restructured to encourage active learning. A more interactive environment is also needed for students' language learning.

Next, the readiness of educators in adopting new teaching methods is another issue that needs to be addressed. Research has shown that flipped learning approach can foster active learning, at the same time helps to strengthen students' verbal communication skills (Tazijan et al., 2017). Despite a positive attitude of students towards the teaching methodology, the

concept is still considered new in Malaysia (Rahman et al, 2019a). It is also stated that this new method is yet to be completely implemented in Malaysia (Ngo & Yunus, 2021). In other words, not all higher education institutions are practicing flipped learning in ESL classrooms. According to researchers Ngo and Yunus (2021), it is necessary to integrate technology in teaching and learning of the English language. This is because conventional teaching methods seem to make learning boring and decrease the students' interests. Therefore, investigation concerning the intention of lecturers in adopting flipped learning would be helpful to encourage the new mode of learning.

Among the past studies done in relation to flipped learning, most of them are mainly focusing on the effectiveness as well as learners' perceptions towards the approach (Pudin, 2017; Safiyeh & Farrah, 2020; Teo & Sathappan, 2018; Woon & Yunus, 2019; Zainuddin & Attaran, 2016). As a matter of fact, instructors' perceptions are just as important because they are the implementer of the teaching approach. This is proven through the findings of Zainuddin and Attaran (2016), whereby majority of the students agreed that feedback given outside the class is vital in facilitating their learning. In other words, instructors play an indispensable role in deciding the success of flipped learning. Hence, the current study investigates the factors that could affect the intention in adopting flipped learning from the perspective of ESL lecturers.

Although there are studies exploring Malaysian ESL lecturers' attitudes to use flipped learning (Rahman et al., 2019b; Rahman et al., 2021), the researchers merely concentrated on lecturers from public universities. Furthermore, they only put emphasis on quantitative study. To put it another way, there is a lack of research from the lenses of lecturers at private higher education institutions. Thus, the present study fills the research gap, emphasizing the perspective of lecturers who are working in private education institutions. To be specific, the

researcher will look into the factors that affect the intention of lecturers in utilizing the flipped learning approach.

1.3 Research Objectives

The objectives of this study are:

1. To explore the factors that influence ESL lecturers' behavioural intention in adopting flipped learning.
2. To investigate ESL lecturers' perception towards the adoption of flipped learning.

1.4 Hypotheses

H1: Performance expectancy (PE) significantly influences ESL lecturers' behavioural intention in adopting flipped learning.

H2: Effort expectancy (EE) significantly influences ESL lecturers' behavioural intention in adopting flipped learning.

H3: Social influence (SI) significantly influences ESL lecturers' behavioural intention in adopting flipped learning.

H4: Facilitating conditions (FC) significantly influence ESL lecturers' behavioural intention in adopting flipped learning.

1.5 Research Questions

Based on the research objectives above, this study attempts to answer two research questions:

1. What are the factors that influence ESL lecturers' behavioural intention in adopting flipped learning?
2. How do ESL lecturers perceive the adoption of flipped learning?

1.6 Theoretical Framework

Intention is defined as motivational factors that can lead to a behaviour (Ajzen, 1991). While there are many theories describing determinants of behavioural intention, this study employs the Unified Theory of Acceptance and Use of Technology (UTAUT) as a theoretical lens to explore the factors that influence lecturers' behavioural intention in adopting flipped learning. As flipped learning is technology-enhanced (Kim et al., 2017; Lee et al., 2017; Long et al., 2017, as cited in Long et al., 2018), it is relevant to explain the intention of using the approach through technology acceptance and adoption theory. According to Ming (2010, as cited in Hashim & Shaari, 2020), hesitation of teachers to use flipped learning in the classroom is due to insufficient teaching resources and technological knowledge, inadequate school support as well as lack of confidence. In this case, UTAUT which incorporates eight models and takes in determinants from different aspects is deemed suitable to guide the study, particularly in developing the questionnaire.

The four main determinants proposed in UTAUT are used in the current study for designing the questionnaire. These include performance expectancy, effort expectancy, social influence as well as facilitating conditions. Firstly, performance expectancy can be understood to mean the extent to which a person thinks that by using a particular system or technology, his or her job performance will be improved (Venkatesh et al., 2003). In the context of this study, it can be referred to as how the lecturers believe flipped learning would be useful in providing them a better teaching experience. As stated by Long et al. (2017, as cited in Long et al., 2018), teachers who used flipped learning strongly believe that it could enhance their students' learning. Thus, performance expectancy would be a predictor of the intention to use flipped learning.

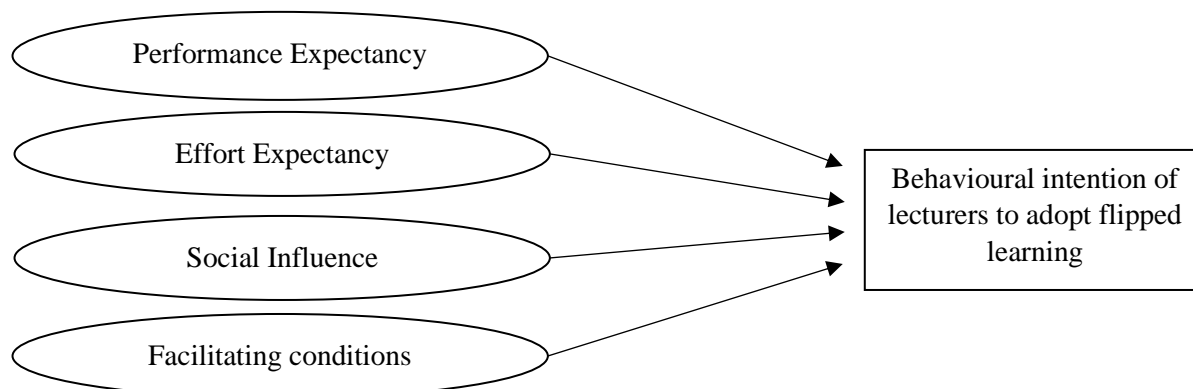
Besides that, effort expectancy means the level of easiness involved with using the particular system (Venkatesh et al., 2003). El-Masri and Tarhini (2017) suggested when people

think a system is easy to use, it is presumably that they will embrace and use the system. In the same token, whether lecturers believe flipped learning is easy or difficult to use would influence their intention and decision to implement the approach in classrooms. In addition, social influence is how much a person believes that people around think he or she should be the user of a new system (Venkatesh et al., 2003). Previous study indicated that social influence has a direct effect towards the behaviour intention of e-learning implementation (Raza et al., 2020, as cited in Qiao et al., 2021). To put it into the context of this study, lecturers' intention to adopt flipped learning can be affected by the way they think their superior and colleagues will view them.

Moving on, facilitating conditions can be known as the level a person believes in the existence of organizational and technical infrastructure to support the use of a system (Venkatesh et al., 2003). As mentioned beforehand, one reason that hinders teachers from adopting flipped learning is due to the lack of school support and confidence (Ming, 2010, as cited in Hashim & Shaari, 2020). In this study, facilitating conditions include the resources and knowledge needed by the lecturers to adopt flipped learning. Although there are another four determinants — gender, age, experience as well as voluntariness that act as moderators in UTAUT, they are excluded from the present study due to time constraint. The theoretical framework of the current study is illustrated in Figure 1.1.

Figure 1.1

Theoretical Framework of the Current Study



1.7 Significance of Research

As noted, flipped learning is still a novel concept in Malaysia; therefore, it is rather significant to understand the usage of this approach among the educators. With this, findings of the present study would contribute to the existing literature regarding the factors that affect the lecturers' intention to use flipped learning approach. Additionally, it would provide insights concerning the perception of lecturers in integrating flipped learning into the teaching of English. This information would be useful, and it is expected to serve as a basis for the execution of flipped learning in English language teaching, at tertiary level class in particular. To point out, the information gained from this study can bring advantages to the educators and the students. By understanding the use of flipped learning among lecturers and the reasons behind, the educators would enhance their teaching methods and incorporate more technological tools in their class. This, in turn, will be beneficial to students' language learning.

Apart from educators and students, the findings in the study are also expected to be advantageous to stakeholder or the private higher institutions. Information about the factors that would affect the lecturers' intention to adopt flipped learning may allow the stakeholder to come up with a system or training program that can support the implementation of flipped

learning in the classrooms as well as sustain the use of flipped learning. As stated by Higher Education Minister Datuk Seri Dr Noraini Ahmad, teaching and learning modules and evaluation methods of higher education institutions are required to transform in order to achieve the goals of education digitalization (Yusof, 2021). In this regard, responses from the study will offer an idea to the policymakers on developing new educational plans that encourage the use of flipped learning in ESL classrooms as well as technology infusion.

1.8 Limitation of Research

The main limitation of this research would be the issue of generalisation due to the limited number of participants and the chosen institutions. To enumerate, the study only focused on ESL lecturers from private higher education institutions such as Universiti Tunku Abdul Rahman (UTAR), Tunku Abdul Rahman University College (TARUC), Quest International University, Xiamen University Malaysia, and University of Nottingham Malaysia. Subsequently, the number of participants is restricted. In fact, ESL lecturers who are teaching in other private colleges, universities and higher education institutions are not included. Therefore, the findings of the study may not be able to represent the opinion of all private lecturers in Malaysia. Not to mention, lecturers from different universities would have students with varied learning styles, hence resulting in different ways of teaching. If the study involves a larger number of participants from various institutions, results may vary. Given these points, the researcher in this study would have difficulty to generalise the findings to all ESL lecturers in the country.

1.9 Definitions of the Keywords

1.9.1 Flipped Learning

Flipped learning, or flipped classroom is a term describing pedagogy whereby lectures are presented through recordings to students prior to the class, whereas class time is used for

higher order cognitive tasks (Mohan, 2018). Moreover, this concept can be explained as the “inverted classroom”, and it has been implemented in numerous Western classrooms (Chua & Lateef, 2014). The primary goal of flipped learning is to increase the amount of face-to-face contact time between teacher and the students (Sams & Bergmann, 2013, as cited in Rahman et al., 2019b).

1.9.2 Behavioural Intention

Behavioural intention means the likelihood of an individual to involve in a particular behaviour (Fishbein & Ajzen, 1975). In the context of information technology usage, Aditia et al. (2018) defined it as a behavioural predictor in using technology. In fact, various determinants of behavioural intention have been suggested. For instance, attitude and subjective norms are proposed as determinants of behavioural intention (Fishbein & Ajzen, 1975). This indicates that an individual is more likely to perform an action when he or she views the action positively and believes it is essential to family, peers and the society (LaCaille, 2013). On the other hand, Ajzen (1991) suggested perceived behavioural control would influence one’s behavioural intention. It implies that the confidence of an individual in performing an action would affect his or her behaviour (Ajzen, 1987, 1991; Ajzen and Madden 1986, as cited in Bagozzi, 1992).

1.9.3 Unified Theory of Technology Acceptance and Use of Technology (UTAUT)

UTAUT is the most widely used model in the field of technology acceptance, with an emphasis on factors for effective information system adoption (Al-Mamary et al., 2015, as cited in Almaiah et al., 2019). It was pioneered according to eight technology acceptance theories or models, and functions to elucidate technology acceptance. This model comprises four main constructs that are known to be direct predictors of behavioural intention and behaviour,

namely performance expectancy, effort expectancy, social influence and facilitating conditions (Venkatesh et al., 2003).

1.9.4 English as a Second Language (ESL) Lecturers

Shu (1994, as cited in Peng, 2019) considered ESL as English as a second language, and it is asserted that the language has equal status as the mother tongue. In ESL classroom teaching, students are the central for classroom activities initiated by the teachers (Peng, 2019). Meanwhile, lecturers are instructors who work at tertiary institutions (Barnes, 2010).

1.10 Summary

On the whole, this chapter has discussed how the growth of technology called up a change in education, specifically in English language teaching. In fact, restructuring of teaching methodology is needed to create a more interactive environment for ESL learners in Malaysia. While flipped learning has received positive responses from the students, the present study seeks to investigate the perception of ESL lecturers towards the adoption of flipped learning and the factors that would affect their intention to adopt the approach. Significantly, the findings are expected to shed light on the issue concerning the use of flipped learning at tertiary level ESL classroom.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

The present chapter illustrates theories that are related to the concepts of this study which subsequently give rise to the importance of educators in achieving the goal of flipped learning. Furthermore, this chapter also highlights the gap in the existing literature. Past studies involving effectiveness, perceptions of students and teachers done by various researchers are also discussed.

2.1 What Theories are Related

2.1.1 Constructivism

The use of flipped learning in classrooms is strongly related to constructivist learning theory. According to Xu and Shi (2018), constructivism encourages learning to take place in a student-centered setting whereby knowledge and understanding can be socially constructed. In fact, the idea of constructivism is greatly associated with the theories of Vygotsky and Piaget. To explain, Vygotsky (1978, as cited in Eppard & Rochdi, 2017) perceived learning as a process in which students are aided by more knowledgeable others. On the other hand, Piaget emphasised the importance of constructing knowledge through experience (Eppard & Rochdi, 2017). Instead of passively receiving information, students should make meaning and construct their own knowledge while interacting with others. A study done by Barman and Bhattacharyya (2015) has shown that constructivist teaching methods are useful in improving students' academic performance. Compared with traditional teaching methods, constructivist teaching methods are more effective as they promote meaningful learning. It is also believed that constructivist approach is beneficial to language teaching because it arouses the students' interests in learning something new. For instance, they get the opportunity to construct extra

knowledge through writing poems, letters and so forth (Aljohani, 2017; Suhendi & Purwarno, 2018).

With respect to the aforementioned principles, it can be said that the practice of flipped learning is based on the constructivist learning theory. This is mainly due to its notion of active learning. Students receive information by watching videos before attending class and enhance their learning through inquiry-based and collaborative activities during class time (Bergmann & Sams, 2012, as cited in Xu & Shi, 2018). In fact, they should be provided control over the learning process as well as the opportunities to reflect in order to obtain meaningful learning experience (Ally, 2008, as cited in Rahman et al., 2021). With this in mind, guidance of instructors is crucial whereby they act as the organizer, helper and mentor who facilitate students' learning in classrooms (Xu & Shi, 2018). It is noteworthy that the effectiveness of flipped learning in class not only requires lesson videos prior to class time, but also strong and successful activities during class (Erbil, 2020). This subsequently brings forth the significance of instructors' role to integrate the necessary practices and ensure students achieve the learning goals.

2.1.2 Technology Acceptance Theories

Since instructors play a significant role in the implementation of flipped learning, their intention and acceptance to use the new pedagogical method should not be overlooked. As suggested by researcher Wang (2017), there are external and internal barriers that hinder the willingness of educators to adopt flipped learning. External barriers involve inadequacy of time, technical training and support. As for internal barriers, it is reported that teachers' pedagogical beliefs have turned out to be an inhibitor for them to use flipped learning. To clarify, most teachers still hold the belief that conventional teaching methods are more productive to prepare students for their assessments. Apart from that, insufficient exposure to ICT and lack of self-confidence also prevents teachers from adopting flipped learning (Wang,

2017). In accordance with this information, instructors' behavioural intention to implement flipped learning in the current study can be related to technology acceptance theories.

Based on the Technology Acceptance Model (TAM), a frequently used acceptance theory in study about e-learning (Šumak et al., 2011), perceived usefulness and perceived ease of use are important predictors of a person's information systems acceptance (Davis, 1986, as cited in Lee et al., 2003). According to Davis (1989, as cited in Surendran, 2012), perceived usefulness means the belief of using a certain system would improve a person's work performance. Whereas perceived ease of use refers to the extent an individual believes it would take less effort when he or she uses a particular system. As mentioned earlier, study has shown that teachers who are reluctant to use flipped learning encounter the issue of insufficient time, and at the same time they prefer traditional way of teaching compared to flipped learning. Given these points, both perceived usefulness and perceived ease of use can be connected to the lecturers' belief on the effectiveness of flipped learning as well as time needed for lesson preparation.

Another worth discussing theory would be the Theory of Planned Behaviour (TPB) that posited perceived behavioural control as a predictor of individuals' intention in using a system (Ajzen, 1991). It can be used to refer to how one perceives internal and external factors on his or her behaviour (Taylor & Todd, 1995, as cited in Venkatesh et al., 2003). Looking into the context of flipped learning, this is in relation to the factor of low self confidence that influences instructors' intention in adopting flipped learning.

2.1.3 Unified Theory of Technology Acceptance and Use of Technology (UTAUT)

Looking into various factors that would challenge the intention of instructors to use flipped learning reported by the previous research (Hashim & Shaari, 2020; Wang, 2017), the Unified Theory of Technology Acceptance and Use of Technology (UTAUT) is found closely

associated with the context of this study. This widely used model comprises different technology acceptance theories, including TAM and TPB that are explained in the previous section. Other involved theories are Theory of Reasoned Action (TRA), Motivational Model (MM), the Combined TAM and TPB (C-TAM-TPB), Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT) as well as Social Cognitive Theory (SCT) (Venkatesh et al., 2003).

Significantly, each of the determinants in UTAUT combines different constructs from other theories. To point out, performance expectancy involves TAM's perceived usefulness, MM's extrinsic motivation, job-fit from MPCU, relative advantage proposed in IDT as well as outcome expectations from SCT. These core constructs are very much similar to the outcomes of job satisfaction after usage of certain systems. One study conducted by Long et al. (2018) showed that performance expectancy is a strong predictor in affecting the decision of instructors from higher education to implement the flipped classroom model.

As for effort expectancy, it covers several constructs from TAM, MPCU and IDT that deal with the belief of how easy or difficult it is to use a system or technology (Venkatesh et al., 2003). These include perceived ease of use, complexity and ease of use respectively. Even though Venkatesh et al. (2003) has discovered that the significance of effort expectancy is only applicable during the early phases of implementation, it is proven to be a remarkable predictor in influencing instructors' behavioural intention to adopt flipped learning (Bakheet & Gravell, 2020). Moving on, social influence contains subjective norms from TRA, TPB and C-TAM-TPB, social factors in MPCU as well as image in IDT. These constructs deal with the influence of others' views about the use of a certain system towards the intention of an individual. In fact, Bakheet and Gravell (2020) mentioned that social influence significantly affects instructors' behavioural intention to implement the flipped learning.

Lastly, facilitating conditions consist of several constructs, namely perceived behavioural control from TPB and C-TAM-TPB, facilitating conditions from MPCU, and compatibility from IDT (Venkatesh et al., 2003). This is important in understanding an individual's belief towards the support available to help with his or her use of certain technology. Generally, it is claimed that facilitating conditions would not directly influence the intention of an individual in using new technology. However, He and Lu (2007, as cited in Rahman et al., 2021) stated that facilitating conditions can be used to predict behavioural intention.

2.2 Gap in the Literature

Following the trend of technology-integrated learning, flipped learning has become something ubiquitous in the education field. With that, many studies have been done by the researchers throughout the years to look into its effect in various disciplines (Rahman et al., 2019c). As in the language teaching field, ESL in particular, research in Malaysia has given importance on the effectiveness of flipped classrooms among undergraduate and primary school students (Tazijan et al., 2017; Teo & Sathappan, 2018). There are also some studies exploring the experience and feedback of students as well as teachers in using the approach (Hashim & Shaari, 2020; Ngo & Yunus, 2021; Pudir, 2017; Zainuddin & Attaran, 2016). Nonetheless, there are limited studies on the perception of instructors who are working in universities. According to Embi (2014, as cited in Rahman et al., 2019a), lecturers must be equipped with proper training in conducting classes under the new approach. Indeed, viewpoint of the lecturers should also be given emphasis.

Significantly, the latest flipped learning study in Malaysia has investigated the predictors of ESL lecturers' intention to employ the approach (Rahman et al., 2021). Yet, the participants of the study only involved lecturers from public universities. As the setting of

public universities and private universities may differ, further investigation which involves lecturers from private higher institutions is needed. Moreover, the study merely employed survey questionnaires for data collection. In this case, in-depth research would be required to provide discussion on the issue. All things considered, the current study intends to examine how lecturers perceive flipped learning and its related factors.

2.3 Other Studies Conducted

2.3.1 Effectiveness of Flipped Learning

Numerous studies pertaining to the effectiveness of flipped learning have been carried out over the years, and all of the studies indicated a positive result (Lee, 2019; Noh et al., 2021; Tazijan et al., 2017; Sukerti et al., 2020; Safiyeh & Farrah, 2020; Teo & Sathappan, 2018). To point out, Tazijan et al. (2017) has conducted research to investigate how effective flipped classroom methods are in improving university students' English communication skills. Students who participated in the study attended 5-week flipped learning lessons whereby they were exposed to course context on social networking sites before attending face-to-face lectures. They experienced discussion during in-class sessions, and they were required to produce an oral presentation upon completion of the 5-week lessons. Findings demonstrated that students were more proactive and enthusiastic in their learning due to the use of media. Interestingly, flipped classroom methods have encouraged students to speak and express their opinions in class. Besides, data gathered through questionnaires and interviews in the study also highlighted students' agreement on the benefits of flipped learning. Most of them agreed that the combination of online tools and in-class discussions are helpful in enhancing their presentation performance. With this information, the researchers concluded that flipped learning is a way to make verbal communication class interesting, at the same time maximize students' practice time (Tazijan et al., 2017).

Additionally, there is quasi-experimental research done by Teo and Sathappan (2018) which explored the effectiveness of flipped learning in teaching English adjectives. This study comprises 20 Malaysian Year 4 Chinese ESL learners who were divided into experimental and control groups. By using pre-test and post-test, the researchers compared the students' mastery level of English adjectives between the two groups. Findings of the study indicated that there was an improvement in students' results for experimental and control groups. However, the margin of improvement for students who underwent flipped learning method was higher than that of those who learned English adjectives through traditional classroom approach. This implies that flipped learning approach is more effective than the traditional classroom approach to strengthen students' grammar knowledge. As a matter of fact, this is also in parallel to another quantitative research carried out by Sukerti et al. (2020). The study evaluated the effectiveness of using flipped learning to enrich undergraduate students' English writing competence. By comparing and analysing the students' essays written in the traditional classroom and flipped classroom, it was found that students' writing improved after experiencing flipped learning approach (Sukerti et al., 2020). This means that flipped learning approach is helpful in teaching writing skills. In this sense, the researchers further explained that flipped learning increases the time for teacher-student interaction, and the assistance of teachers has allowed students to clear their doubts in writing tasks (Sukerti et al., 2020).

Next, Safiyeh and Farrah (2020) studied the efficacy of flipped learning in teaching English language skills, grammar and vocabulary among Grade 7 students in Farahat Secondary Girls' School, Palestine. Similarly, the participants were grouped into experimental and control groups, with one attending flipped learning lessons, and another learning through traditional methods. Data was gathered through pre-test and post-test to determine students' proficiency in reading comprehension, listening and speaking, writing, grammar as well as vocabulary. As expected, findings depicted that the integration of flipped learning led to a

substantial increase in students' grades (Safiyeh & Farrah, 2020). This further confirms the benefits brought by flipped learning in language teaching. As such, the teachers in the study also expressed their preference on using flipped learning approach, despite the issue of internet connection faced by students. Not only this, they demonstrated their views on how flipped classrooms are helpful in enhancing students' reading and communicative skills, as well as personalities (Safiyeh & Farrah, 2020).

More often than not, the model of flipped classroom is advocated as a pedagogical method that supports active learning (Pierce & Fox, 2012, as cited in Jamaludin & Osman, 2014). Relatively, there is a study conducted by Lee (2019) which analysed the potential of flipped classroom in supporting learner-centered learning among Malaysian primary level students. The study involved 60 upper primary students who have equal level of English proficiency. Placing the students in two different groups, namely flipped classroom and non-flipped classroom, the researcher made a comparison between their performance in terms of preparation before class, on-time submission of homework, amount of time spent for homework as well as assessment scores. In addition to observation during class, the researcher also carried out surveys to further investigate parents' and students' perception towards the learning methods. Based on the findings, there was a higher percentage of students from flipped classroom group prepared for their lessons before class. Surprisingly, majority of students who went through flipped learning submitted their homework on time, whereas only half of the students in the non-flipped classroom group handed in their homework within expected time. Not to mention, students who are in the flipped classroom group also spent less time on homework than those who learned in non-flipped classrooms. Likewise, the students from the group with flipped learning scored better in their results, and they participated more actively during class activities. Notably, flipped learning leads students to be independent and responsible in their learning. This is also in line with the results of the parents' survey, whereby

90% of flipped classroom parents agreed that their children are happy and motivated to learn in flipped classrooms (Lee, 2019). Overall, this research has shed light on the effectiveness of flipped learning.

Uniquely, one recent study has proven that flipped learning method can increase students' academic achievement and learning satisfaction level (Noh et al., 2021). With the objective to identify the effects of flipped learning on students' results and satisfaction, the researcher divided 80 Malaysian Primary 5 students into control and treatment groups. To point out, the control group learned history through conventional teaching method, whereas the treatment group learned history via flipped learning method. Data was collected through pre-test and post-test, together with survey questions that are made up of 5 Likert scales. Findings of the study portrayed that the students in the treatment group had higher learning scores in their history subject. This is because flipped learning allows students to explore the lessons earlier, which eventually built up their existing knowledge and confidence in learning. On the other hand, satisfaction scores of students in the treatment group were also found higher compared to that of the control group (Noh et al., 2021).

2.3.2 Students' Perception on Flipped Learning

Firstly, research conducted by Zainuddin and Attaran (2016) which aims to investigate students' feedback towards flipped classroom approach has discovered that the pedagogical method was welcomed by the students. In the study, the researchers employed questionnaire surveys, focus group and interviews to get information from 13 undergraduate students studying at the University of Malaya. Based on the reported results, majority of the students were of the opinion that the flipped classroom appears to be more engaging as opposed to the traditional classroom as there is more time to communicate with the instructor. Online platforms used outside the class also provide the opportunity for the students to build rapport with their peers. Moreover, the students also offered positive responses towards the learning

materials provided before class such as videos and PowerPoint presentation slides. More importantly, they expressed their views stating that flipped learning helps to enhance their understanding as they have time to familiarise themselves with the topics of the subjects (Zainuddin & Attaran, 2016). While majority of the students showed satisfaction towards the flipped classrooms, two key points that are worthy of attention would be the duration of videos and the instructors' feedback. It was reported that videos that are too long would make the students bored. To increase the effectiveness of flipped classrooms, lecturers also need to take up the role of a facilitator and provide constructive feedback to the learners (Zainuddin & Attaran, 2016).

Comparatively, similar results were presented in research focusing on the views of students at Stockholm University in Sweden (Nouri, 2016). Referring to the data gained through a questionnaire, it was found that a large portion of students had positive views towards the use of flipped learning. To explain, the students preferred learning through videos due to the functions including pausing, rewinding and fast forwarding. This indicates that the students prefer having their own control over learning whereby they can choose to learn at their own pace. Furthermore, the data also claimed that flipped learning environment provides flexibility and mobility to the students. In another instance, students expressed their opinion that flipped learning supports their learning better compared to traditional lectures. Interestingly, the study demonstrated low achievers had more favourable attitudes towards the use of videos as the learning aid, and they experienced enhanced and more effective learning through flipped classrooms. This is most probably because low achievers are more confident when they get the opportunity to learn at their own pace (Nouri, 2016). In short, the findings of this study provide an insight to lecturers who intend to flip their classes.

Lastly, in the Indonesian context, Afrilyasanti et al. (2017) has attempted to look into the perception of English as a Foreign Language (EFL) high school students on the use of

flipped classroom model in their writing class. Instruments to collect data included a questionnaire covering two aspects, namely meaningfulness of flipped classroom model and writing competence, observation as well as interview. Results revealed students' positive view on the implementation of flipped learning model whereby they believed that the classroom discussions and collaborative activities could help to strengthen their understanding. Additionally, students agreed with the importance of peers' and teacher's feedback in enhancing their writing skills. Nevertheless, the students showed disagreement with the statement that watching video lectures would prepare them for the in-class activity. In fact, it was discovered that not every student watched the video lectures given prior to class. Whereas findings of the interview unfolded the factors of why students did not watch the video lectures. For example, students were occupied with other homework, they had insufficient internet quota and they believed that the video content would be repeated during class sessions (Afrilyasanti et al., 2017). To sum up, the findings of this study leave a question to the teachers to ponder, particularly on the ways to encourage students' self-learning.

2.3.3 Educators' View on Flipped Learning

There is a quantitative study done by Bakar et al. (2018) which analysed primary English teachers' viewpoint about using flipped learning in teaching grammar and the issues that would influence effectiveness of a flipped learning approach. Based on the results gained from the survey questionnaire, the researchers discovered that teachers had positive perceptions towards the effectiveness of flipped learning. For one thing, majority of the teachers acknowledged that flipped approach strategy increases students' time to use grammar components in speaking activities, boosts students' confidence, enhances teacher-student interactions and creates more engagement in class. With that being said, teachers who participated in the study perceived time as a big challenge to the effectiveness of flipped learning. This can be explained because teachers might require more time in designing

activities and materials when it comes to flipped classrooms (Webb et al., 2014, as cited in Bakar et al., 2018).

Moving on, the findings of a study done by Hashim and Shaari (2020) also reported positive responses of ESL educators towards the execution of flipped learning approach. In the study, the researchers gathered 50 Malaysian teachers' opinions through a structured questionnaire. Generally, the results showed agreement of teachers towards the usefulness of teaching online. In their point of view, teaching from YouTube videos is effective, and flipped approach offers the students an opportunity to communicate with their peers. It is also stated that the teachers themselves agreed with the importance of teachers' feedback. Indeed, this corroborates with the findings of Zainuddin and Attaran's (2016) study which explored the students' perception towards flipped classrooms. However, the teachers in the study expressed their views that students do not like watching short videos (Hashim & Shaari, 2020). This is in contrast with students' perception as found in a previous study (Zainuddin & Attaran, 2016).

Ultimately, similar findings can be seen in one recent study which evaluated the opinions of Malaysian primary ESL teachers in rural areas (Ngo & Yunus, 2021). Even though there were a number of participants who did not integrate flipped learning method in their teaching, nearly all of them agreed that the method could help to enhance students' learning. To point out, the teachers were of the opinion that lesson videos are beneficial as students can choose to rewatch them when they encounter problems. Most importantly, some teachers stated that flipped learning is a good way to encourage active and independent learning. Yet, a few teachers also expressed their concern about the suitability of flipped learning in rural areas due to the lack of ICT facilities (Ngo & Yunus, 2021).

2.3.4 Studies Applying UTAUT

As a matter of fact, there are studies related to the current research done in recent years. To enumerate, Long et al. (2018) has scrutinized the factors that affect lecturers' decisions to use a flipped classroom model. By applying UTAUT in a questionnaire, the quantitative study collected data from 227 instructors at a south-eastern US university. The results of the analysis showed that factors that strongly affect lecturers' adoption decisions were performance expectancy and technology self-efficacy. On the contrary, facilitating conditions did not appear to be a strong factor. The findings imply that internal barriers should be eliminated in order to encourage the adoption of flipped classrooms among the instructors.

In Malaysian context, Rahman et al. (2021) also used UTAUT as a theoretical lens to examine intention of ESL lecturers to employ flipped learning. The participants of the study involved lecturers from four public universities, and data collection was done via a questionnaire. Among the four different constructs, the findings demonstrated that only social influence was a significant factor that can predict the lecturers' intention of using flipped learning. Conversely, performance expectancy, effort expectancy and facilitating conditions did not affect the intention of lecturers in using flipped learning, as the findings suggested (Rahman et al., 2021). To conclude, this study found that external barriers are rather significant in influencing the educators' intention, which is in contrast with the findings reported by Long et al. (2018).

2.4 Summary

To sum up, this chapter has explored several theories that are in relation to flipped learning and individuals' behavioural intentions. For instance, constructivist learning theory, Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB) and Unified Theory of Technology Acceptance and Use of Technology (UTAUT). Referring to the flipped

learning studies, many have asserted the benefits of the method in improving learners' performance from different aspects. With this in mind, there is limited research pertaining to the elements that would influence decision of instructor in adopting flipped learning. This has put forth the establishment of the current study.

CHAPTER 3

METHODOLOGY

3.0 Introduction

In this chapter, a detailed explanation about the methodology of the study will be given. This comprises several components including information of the research location, research design, sampling technique and sampling strategies, participants involved, data sources as well as data collection process. This is followed by a comprehensive description of the data analysis procedures. Lastly, there is clarification about validity and reliability of the study.

3.1 Research Site

This study focused on five private higher education institutions in Peninsular Malaysia, including Universiti Tunku Abdul Rahman (UTAR), Tunku Abdul Rahman University College (TARUC), Quest International University, Xiamen University Malaysia, and University of Nottingham Malaysia. These private higher education institutions were selected as they offer undergraduate programmes which are greatly related to ESL studies. For instance, UTAR has English Education (ED) and English Language (EL) programmes whereas TARUC offers English Studies, English with Drama and English with Education programmes. For Quest International University, there is Teaching of English as a second language (TESL) programme. On the other hand, Xiamen University Malaysia has English Language and Literature programme while University of Nottingham Malaysia offers programmes such as English Language and Literature and English with Creative Writing. Bearing this in mind, lecturers were selected based on their department.

3.2 Research Design

The study applied mixed methods design to achieve the research objectives. According to Johnson et al. (2007, as cited in Schoonenboom & Johnson, 2017), this type of research

design refers to studies that collect and analyse data by using both quantitative and qualitative methods to attain an extensive understanding regarding a particular topic. By combining the capabilities of both methods, mixed methods design enables the researchers to look into a topic from multiple angles (Shorten & Smith, 2017). Concurrently, it also strengthens credibility of the findings (Bryman, 2006, as cited in Schoonenboom & Johnson, 2017). Therefore, it is believed that mixed methods design is appropriate and effective to be applied in this study. More explicitly, quantitative data would allow the researcher to identify the factors that influence the lecturers' intention of using flipped learning, whereas qualitative data helps to gain deeper understanding of their views on the use of the flipped approach.

3.3 Sampling and Sampling Procedures

Selection of participants in this study was done by using purposive or judgmental sampling technique. This type of non-probability sampling can be generally understood as a deliberate way to choose participants who can provide essential information that is needed in research (Maxwell, 1996, as cited in Taherdoost, 2016). In this case, the selected private higher education institutions must be institutions which offer programmes that are associated with the English language. Along with this, only lecturers who are from the English language department were selected to answer the questionnaire and participate in the semi-structured interview. This is important to make sure that the participants have knowledge and experience in the English language teaching, and they are capable of providing opinions that are relevant to the topic of the study. As an illustration, participants from UTAR should be all from the Department of Languages and Linguistics. For TARUC and Quest International University, participants were selected from the Department of English Studies and School of English respectively. Participants from Xiamen University Malaysia and University of Nottingham Malaysia were also selected based on their teaching courses. According to Malhotra and Birks (2006, as cited in Taherdoost, 2016), one advantage of using purposive sampling technique is

that it brings convenience. In this study, purposive sampling helps to save the time of the researcher during data collection because all the participants will fulfil the requirement of the study, hence the researcher will not have to eliminate unqualified participants after collecting the data.

3.4 Participants Involved in the Research

The present study consisted of 48 ESL Lecturers who are teaching in UTAR, TARUC, Quest International University, Xiamen University Malaysia, and University of Nottingham Malaysia. Moving on to the second part of the study, five participants who participated in the questionnaire were randomly chosen for a semi-structured interview.

As this study mainly concentrates on ESL lecturers, all the participants must be dealing with courses that relate to the English language. To put it another way, the participants should be from the department in relation to languages. Nonetheless, there was no specific requirement on their teaching experience or experience in using flipped learning approach. In order to obtain diverse views concerning the topic, participants can be of different ages and with a variety of backgrounds. Those who have or have not used flipped learning in their teaching were also allowed to take part in the study.

3.5 Sources of Data and Procedures of Data Collection

3.5.1 Survey Questionnaire

To seek answers for the first research question, a survey questionnaire was used to gather responses of the participants. As mentioned by Roopa and Rani (2012), a questionnaire allows the collection of quantitative data to be done in a standardized manner, and this is necessary for ensuring the internal consistency and coherence of the data. Moreover, the researcher administered the survey questionnaire through Google Forms in order to save time. This is also supported by Wright (2005, as cited in Nayak & Narayan, 2019) who claimed that

conducting a survey questionnaire online helps to save cost and time. Another reason that Google Forms was chosen is due to its convenience for the participants and the researcher. To point out, it is easy to use, hence reducing the hassle of the participants in answering the questions. Also, the function available in Google Forms that allows the researcher to transfer collected data to Excel spreadsheets eases the work of the researcher during data analysis.

Generally, the survey questionnaire used in the current study was divided into two parts, namely Part A and Part B. Part A has eight questions whereby Question 5, 7 and 8 are adapted from Osman et al. (2019). All questions in Part A mainly deal with demographic details of the respondents, among which are gender, age, race, highest level of education, teaching experience, and experience in adopting flipped learning. These data would help the researcher to get a better idea of the participants' background. In addition, Part B of the questionnaire is about the variables that would influence the intention of participants to utilize flipped learning. In this section, there are 16 items altogether, and these items are separated according to four independent variables and one dependent variable. The independent variables include performance expectancy, effort expectancy, social influence and facilitating conditions. Meanwhile the dependent variable is behavioural intention. Basically, the items were adapted from UTAUT survey items (Venkatesh et al., 2003) and the survey questionnaire developed by Rahman et al. (2021) in their study with some modifications. To add on, the researcher in this study applied a 5-point Likert scale which ranged from 1 to 5 (1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree). In fact, using a 5-point Likert scale which involves a midpoint would provide an option for the participants to take a neutral stance (Chyung et al., 2017). This, in turn, would reduce bias in the collected data as it is not obligatory for participants to agree or disagree.

3.5.2 Semi-structured Interview

Another instrument used for answering the second research questions was semi-structured interviews. This helped the researcher to investigate the view of ESL lecturers on the adoption of flipped learning. Typically, a researcher who carries out semi-structured interviews will include a sequence of open-ended questions concerning a particular subject matter that he or she wishes to address (Mathers et al., 1998). Mathers et al. (1998) also clarified the usefulness of this type of interview in obtaining attitudinal information. Looking back at this study, semi-structured interview was chosen as one of the research instruments because it enables the researcher to closely explore the topic of flipped learning with the interviewees. The researcher also possesses the freedom to seek extra information from the respondents regarding their thoughts about the adoption of flipped learning in teaching of the English language. Around four open ended questions were developed for the preparation of semi-structured interview.

3.5.3 Data Collection Procedures

In terms of the procedures of data collection, quantitative data was collected before qualitative data. For higher education institutions which needed permission for conducting research, the researcher approached the management through email. A formal consent letter, a copy of the survey questionnaire as well as ethical approval document were attached in the email to get permission from the management of the institutions to conduct the study. Later on, when consent was granted by the management, a generated survey link was distributed to the participants via their university official emails. As for higher education institutions which did not need specific permission, the generated survey link was sent to the participants through their working emails or Microsoft Teams chatbox. Objectives of the research and the information of the researcher were included in the survey questionnaire as a reference for all

participants. There was no specific time given for the participants to answer the questionnaire. The process of data collection took around three months.

After the quantitative data collection was completed, semi-structured interviews began. Five participants who had answered the questionnaire earlier were randomly picked for the interview. With that, the researcher asked the permission from the selected participants by sending them an invitation through email or the Microsoft Teams chatbox. Date and time to conduct the interview session was fixed after the participants agreed to accept the invitation. All the interview sessions were carried out through audio calls on Microsoft Teams or face-to-face based on the convenience of the participants. The session was a one-to-one interview and the duration for each interview session lasted for about 15 minutes. With the consent of the participants, the interview sessions were recorded for the purpose of data transcription. This is rather important because accuracy of transcription provides crucial information, at the same time enhances the methodological accuracy (Nascimento & Steinbruch, 2019).

3.6 Data Analysis Procedures

3.6.1 Quantitative Data Analysis

The methods that the researcher used for analysing quantitative data in this study were descriptive statistics, reliability analysis, correlation analysis and regression analysis.

3.6.1.1 Descriptive Analysis

According to Kaur et al. (2018), descriptive statistics illustrate the summary of data in an ordered manner by showing connection between variables in a sample. In the present study, the researcher applied descriptive analysis to analyse the demographic information gathered through the survey questionnaire. In order to display the information in a clearer way, data were tabulated based on the category name, frequency and percentage distribution.

3.6.1.2 Reliability Analysis

Reliability test plays an important role in ensuring result consistency (Tan, 2013). As Cronbach's alpha is known to be a common method used in assessing internal consistency reliability (Chaudhary, 2016; Trizano-Hermosilla & Alvarado, 2016), it was utilized to test the reliability of the data in the current study. Besides, the analysis was carried out through the Statistics Package for Social Science (SPSS) system. As stated by Chaudhary (2016), the value of Cronbach's alpha must be more than 0.7. Table 3.1 portrays Cronbach's alpha rule of thumb proposed by Chaudhary (2016).

Table 3.1

Cronbach's Alpha Rule of Thumb

$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Note. Adapted from "Consumer Perception Regarding Life Insurance Policies: A Factor Analytical Approach," by S. Chaudhary, 2016, *Pacific Business Review International*, 9(6), p. 57 (http://www.pbr.co.in/2016/2016_month/December/6.pdf). Copyright 2016 by Pacific Business Review International.

3.6.1.3 Pearson Correlation Analysis

After evaluating the data reliability, Pearson correlation analysis was conducted to identify the relation between variables (Senthilnathan, 2019). Generally, the range of correlation coefficient is between -1 and +1, and the value indicates the direction and how strong the relationship is between the variables (Gogtay & Thatte, 2017). To be specific, a

negative value implies that the correlation between the variables is negative. Whereas a positive value shows the existence of a positive correlation between the variables. When it comes to the interpretation of strength, Senthilnathan (2019) proposed that the correlation is very strong when the range of correlation coefficient is from -0.7 to -1.0 or from 0.7 to 1.0. On the other hand, correlation coefficient which ranges from -0.5 to -0.7 or from 0.5 to 0.7 implies that there is a strong correlation. As for the coefficient that is in the range of -0.35 to -0.50, or 0.35 to 0.50, the correlation is considered moderate. Moving on, the correlation is considered weak if the coefficient falls in the range of -0.20 to -0.35, or 0.20 to 0.35. Lastly, when the value of coefficient is 0, it means no relationship is found between the variables (Gogtay & Thatte, 2017; Senthilnathan, 2019).

3.6.1.4 Multiple Linear Regression

According to Tan (2013), regression analysis can be used to analyse the association between one dependent variable and multiple independent variables. Thus, right after the Pearson correlation analysis, the researcher in this study used multiple regression analysis to evaluate how dependent variable is affected by independent variables. In the context of the current study, it is to analyse how behavioural intention is affected by performance expectancy, effort expectancy, social influence as well as facilitating conditions. Similarly, SPSS was used to run the analysis. As suggested by Uyanık and Güler (2013), the equation to test the relationship between variables would be:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + \varepsilon$$

With this, the equation in the current study would be:

$$BI = \beta_0 + \beta_1 PE + \beta_2 EE + \beta_3 SI + \beta_3 FC + \varepsilon$$

whereby,

BI = Behavioural Intention to adopt flipped learning

PE = Performance Expectancy in relation to flipped learning

EE = Effort Expectancy in relation to flipped learning

SI = Social Influence in relation to flipped learning

FC = Facilitating Conditions in relation to flipped learning

ε = error

3.6.2 Qualitative Data Analysis

Thematic analysis was employed to analyse the data gathered through semi-structured interviews in this study. According to Clarke and Braun (2017), thematic analysis is known as a strategy that can be used by the researchers to analyse data through identification of themes. It allows the researchers to see the pattern of meaning in a datum, and further explore the views of the participants. As this study seeks to investigate the lecturers' perception on the adoption of flipped learning, thematic analysis enables the researcher to identify what and how the participants feel about the flipped approach. Following the phases proposed by Braun and Clarke (2006, as cited in Maguire & Delahunt, 2017), the researcher first transcribed the interview data and read through the transcription. Next, the data were coded and further classified according to themes. The results were reported and discussed in the subsequent chapters.

3.7 Validity and Reliability

Validity deals with the accuracy of a study and whether it is assessing what it claims to be assessed (Zohrabi, 2013). In order to have research with better quality, validity is something that should not be overlooked (Burns, 1999, as cited in Zohrabi, 2013). In this study, internal validity can be proven through methodological triangulation whereby more than one method

was used to gather the data needed. While quantitative data gathered through the survey provide findings about the elements that could significantly affect the intention of lecturers in using flipped learning, the researcher also carried out interviews with the participants. The data gained from the interviews supplement the findings in the first stage by confirming the results. To put it differently, combination of both types of data in the study help to yield a comprehensive understanding towards the intention of the participants in adopting flipped learning, which eventually increase the validity of the research.

On the other hand, reliability means consistency of results when the study is being replicated (Nunan, 1999, as cited in Zohrabi, 2013). In this study, the researcher minimized participant bias and researcher bias during data collection to assure reliability. To clarify, the interview session was conducted one-to-one between the researcher and the participant. This prevents the participants or the interviewees from giving the answers that they think are socially accepted. Besides, the researcher attempted to stay objective during the interviewing process. Although semi-structured interviews provided freedom to the researcher in using probing questions to further seek information from the participants, similar questions were pointed to each of the participants. All these were used to ensure the data for the current research were reliable.

3.8 Summary

In summary, this chapter has thoroughly reviewed the research methods and procedures that will be extremely helpful for the researcher to conduct the study. Applying mixed-methods design, this study involved quantitative and qualitative methods. Collection of data was done through two different instruments, namely survey questionnaire and semi-structured interview. Necessary analysis for quantitative data was taken place at SPSS, and thematic analysis was used for qualitative data analysis.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.0 Introduction

The current chapter illustrates an analysis of the results gained from both quantitative and qualitative data. With the attempts to fulfil both research questions in the study (as stated in Chapter 1.5), presentation of the findings is done following the research questions. The chapter encompasses the analysis of participants' demographic background, reliability test, normality test, Pearson correlation, and multiple linear regression. Hypotheses formed in Chapter 1 are also addressed. In fact, data collected by means of semi-structured interviews is presented through themes, subthemes, and their corresponding codes.

4.1 Demographic Information of Participants

Table 4.1

Demographic Information

Background Characteristics	N	%
Gender		
Male	16	33.3
Female	32	66.7
Age group		
21-30 years old	2	4.2
31-40 years old	33	68.8
41-50 years old	7	14.6
51-60 years old	6	12.5
Race		
Malay	10	20.8
Chinese	16	33.3
Indian	15	31.3
Punjabi	2	4.2
Sinhalese	1	2.1
Arab	4	8.3
Highest level of education		
Master's Degree	37	77.1

Doctorate Degree	11	22.9
Experience of teaching at higher educational institution		
1-5 years	8	16.7
6-10 years	16	33.3
11-15 years	11	22.9
More than 15 years	13	27.1
Higher educational institution		
Universiti Tunku Abdul Rahman (UTAR)	26	54.2
Tunku Abdul Rahman University College (TARUC)	10	20.8
Quest International University	5	10.4
Xiamen University Malaysia	3	6.3
University of Nottingham Malaysia	4	8.3
Experience of using flipped learning		
No and not planning to use	4	8.3
Not sure	9	18.8
Plan to use it	11	22.9
Using it currently	24	50
Experience of attending seminar/course/training program concerning flipped learning		
No	15	31.3
Plan to attend	4	8.3
Yes	29	60.4

Table 4.1 displays the demographic information of the participants in this study. There were a total of 48 ESL lecturers who participated, with 66.7% female and 33.3% male. Referring to Table 4.1, majority of the participants were aged 31 to 40 years old, which accounted for 68.8%. Meanwhile, 14.6% of the participants were aged 41 to 50 years old. There were 12.5% of the participants aged 51 to 60 years old, while the remaining 4.2% were aged 21 to 30 years old. In terms of race, 33.3 % of the participants were Chinese. This is followed by Indian and Malay, with 31.3% and 20.8% respectively. 8.3% were Arabians, whereas Punjabi occupied 4.2% of the total participants. Out of the 48 participants, only one was Sinhalese, making up 2.1% of the total.

As pointed out in the table, 77.1% of the total participants have obtained a master's

degree as their highest level of education, whereas 22.9% of the participants have obtained a doctorate degree. In fact, 33.3% of the participants have 6 to 10 years of experience teaching at higher educational institutions. The data also indicated that 27.1% of the participants have teaching experience of more than 15 years. Another 22.9% have taught in higher education institutions for 11 to 15 years, and the remaining 16.7% have 1 to 5 years of teaching experience.

Based on the collected data, more than half of the ESL lecturers who participated in this study were from Universiti Tunku Abdul Rahman (UTAR), which accounted for 54.2%. Another 10 participants (20.8%) were from Tunku Abdul Rahman University College (TARUC). This is followed by Quest International University (10.4%), the University of Nottingham Malaysia (8.3%) and Xiamen University Malaysia (6.3%). Significantly, half of the participants (50%) are using flipped learning in their teaching currently. 22.9% of all participants intended to use flipped learning, while 18.8% were unsure if they have prior experience with flipped learning. The remaining 8.3% have not used flipped learning and they do not plan to use it. Ultimately, the collected data revealed 60.4% of the total participants have attended a flipped learning training program previously. In contrast, 31.3% of the participants have not attended any. Another 8.3% had the intention of attending a training program concerning flipped learning.

4.2 Reliability Test

Table 4.2

Reliability Analysis

Variables	Number of Items	Number of deleted items	Cronbach's Alpha, α
Performance Expectancy (PE)	4	0	0.910
Effort Expectancy (EE)	3	0	0.866

Social Influence (SI)	2	1	0.720
Facilitating Conditions (FC)	1	1	0.711
Behavioural Intention (BI)	3	0	0.976

Reliability analysis was carried out to assess the consistency of items in each variable. Following the Cronbach's Alpha Rule of Thumb proposed by Chaudhary (2016), at least 0.70 is required for Cronbach's alpha to be considered acceptable. Table 4.2 illustrates the Cronbach's alpha values. Based on the results shown, the Cronbach's alpha value for each of the variables was greater than 0.70. In particular, behavioural intention (BI) had a value of $\alpha = 0.976$. Following that would be performance expectancy (PE) that had a value of $\alpha = 0.910$, effort expectancy (EE) with a value of $\alpha = 0.866$, social influence (SI) with a value of $\alpha = 0.720$ and facilitating conditions (FC) with a value of $\alpha = 0.711$. In fact, one survey item in SI and FC were dropped to increase the consistency. As the Cronbach's alpha values of each variable exceeded the acceptable value of 0.70, it implies that they are reliable. This also confirms the reliability of the collected data in this study.

4.3 Normality Test

While the Shapiro-Wilk test is claimed to be an effective test in studying normality for sample sizes below 50 (Ghasemi & Zahediasl, 2012), it was performed to examine the normality of the data in the present study. As stated by Mishra et al. (2019), a statistical significance (p-value) of greater than 0.05 denotes normality. Table 4.3 highlights the results of the Shapiro-Wilk test in this study.

Table 4.3

Shapiro-Wilk Test

Variables	Shapiro-Wilk (p-value)
Performance Expectancy (PE)	0.003
Effort Expectancy (EE)	0.011

Social Influence (SI)	0.003
Facilitating Conditions (FC)	0.004
Behavioural Intention (BI)	0.001

As shown in Table 4.3, the p-value for all the variables was not greater than 0.05, signifying that the distribution of the variables is not normal. However, statistical test results can be inaccurate at times due to the sensitivity of sample sizes (Mishra et al., 2019). In this regard, graphical assessments come in handy as they enable a clearer judgement on the distribution (Ghasemi & Zahediasl, 2012; Mishra et al., 2019). As a matter of fact, Ghasemi and Zahediasl (2012) also recommended a combination of visual and statistical assessments for normality validation. Thus, the normal Q-Q plot (quantile-quantile plot) was employed as a complement to the Shapiro-Wilk test in assessing the normality of the variables in this study. Figure 4.1 to Figure 4.5 illustrate the normal Q-Q plots for the variables PE, EE, SI, FC, and BI.

Figure 4.1

Normal Q-Q Plot of PE

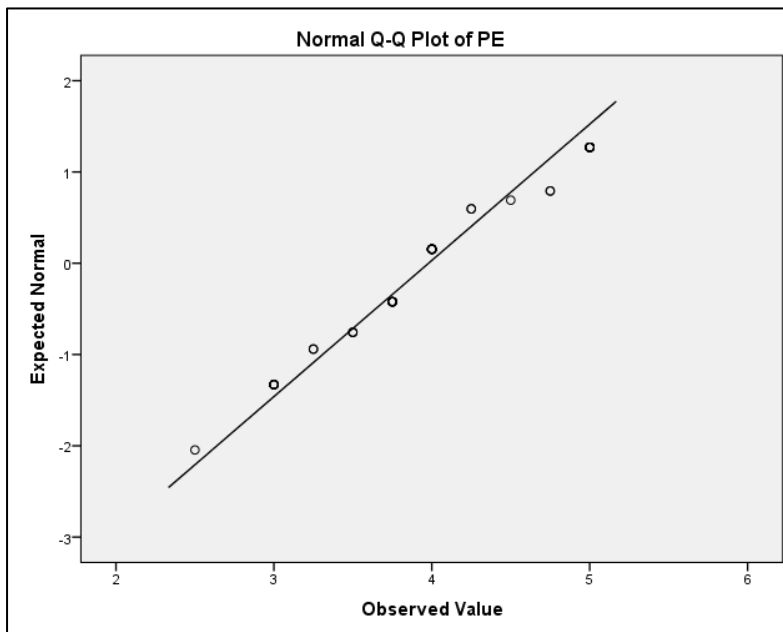


Figure 4.2

Normal Q-Q Plot of EE

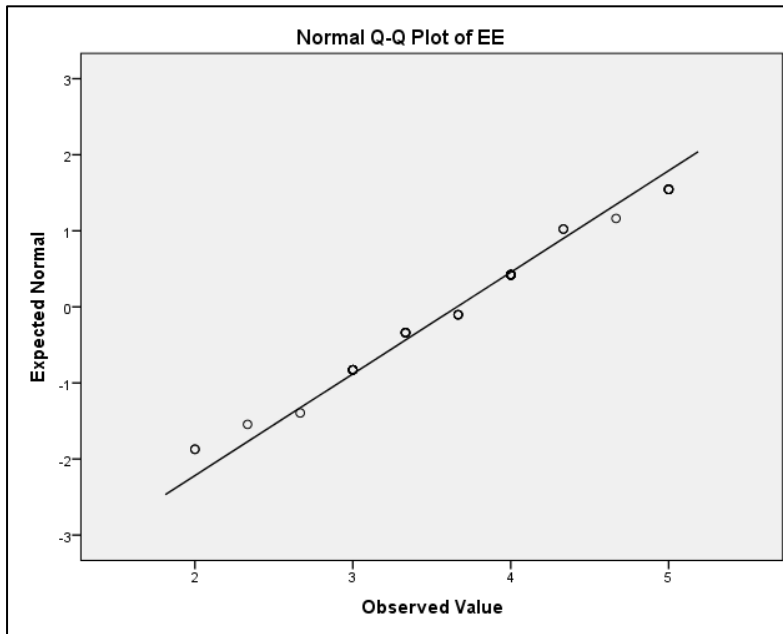


Figure 4.3

Normal Q-Q Plot of SI

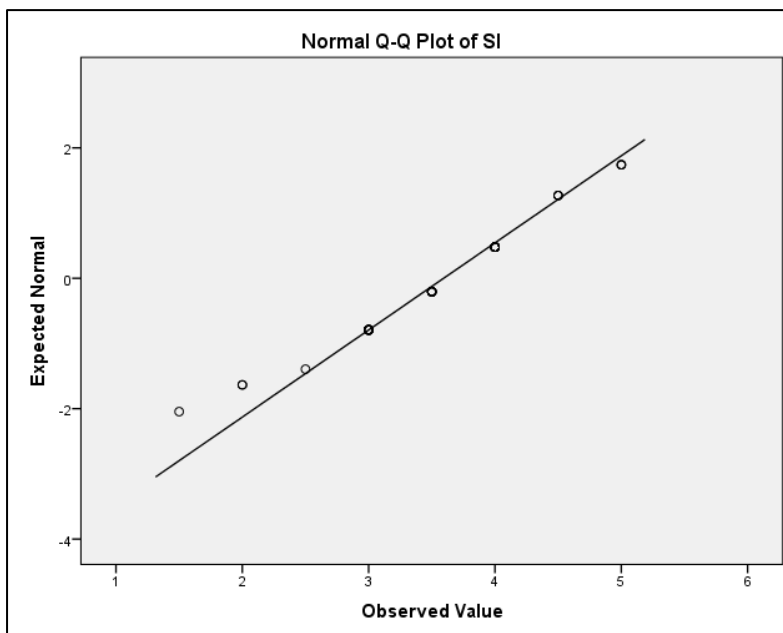


Figure 4.4

Normal Q-Q Plot of FC

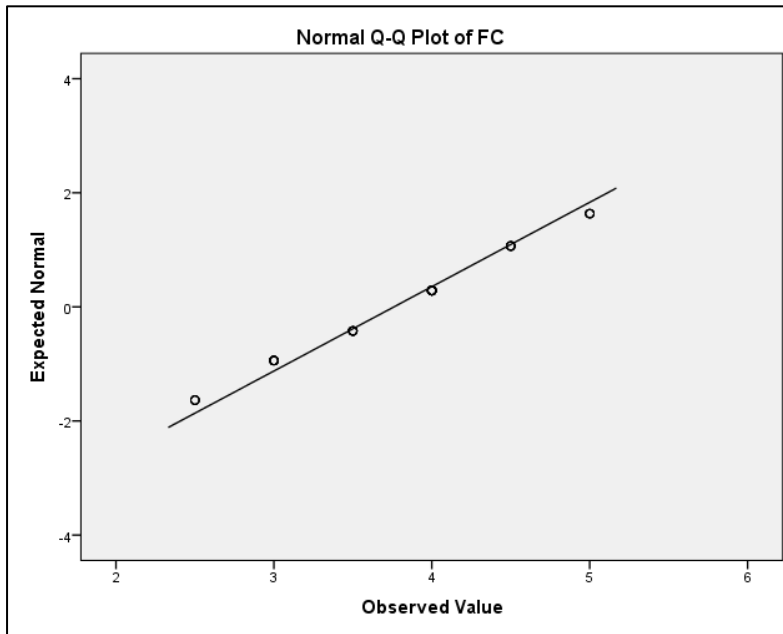
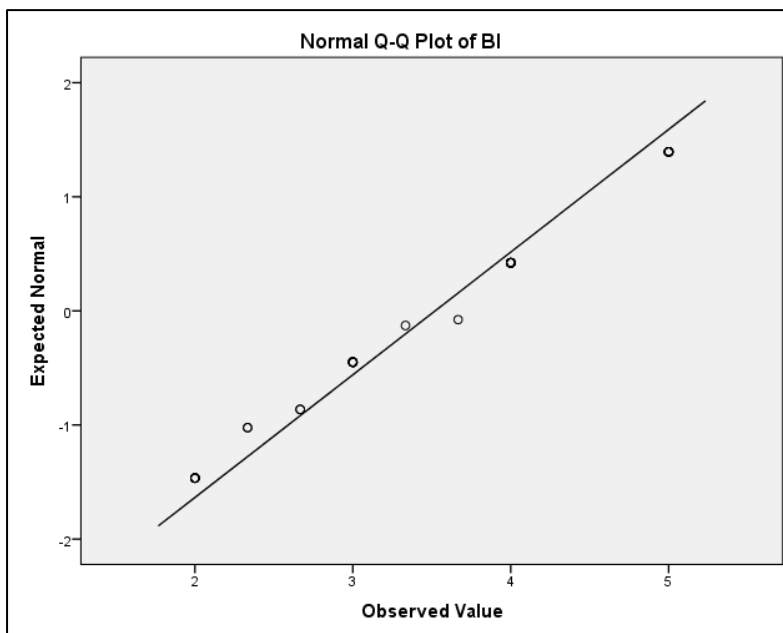


Figure 4.5

Normal Q-Q Plot of BI



Based on Figure 4.1 to Figure 4.5, the points on each graph were found to fall close to the reference line or veer slightly off the line. This suggests that the variables are approximately

normally distributed, as there are no major deviations shown. Significantly, it is also mentioned that disobeying the assumption of normality does not lead to a major issue when the sample size is greater than 30 (Pallant, 2007, as cited in Ghasemi & Zahediasl, 2012). Therefore, a parametric test would be used in this case, despite the fact that the variables are not perfectly normally distributed.

4.4 Pearson Correlation Analysis

In order to identify the relations between the variables while checking the issue of multicollinearity, Pearson correlation analysis was executed on the collected data. Table 4.4 portrays the results of the analysis.

Table 4.4

Results of Pearson Correlation Analysis

Variables	1	2	3	4	5
1. PE	-				
2. EE	0.473**	-			
3. SI	0.147	0.001	-		
4. FC	0.317*	0.606**	-0.07	-	
5. BI	0.573**	0.491**	0.107	0.586**	-

* $p < .05$. ** $p < .01$.

As presented in Table 4.4, the independent variables (performance expectancy and facilitating conditions) had a strong relation with the dependent variable (behavioural intention) as their correlation coefficient values fell between 0.5 and 0.7. Apart from this, the relationship between effort expectancy and behavioural intention was moderate in terms of strength. However, the correlation coefficient values indicated that there was a very weak correlation between social influence and behavioural intention.

In fact, multicollinearity can be assessed through the correlations between independent

variables. As suggested, the correlation coefficient must not be greater than 0.7 (Pallant, 2020). In this case, the correlation coefficients of all the independent variables shown in the results were less than 0.7. This implies that multicollinearity does not exist in the current study.

Table 4.5

Collinearity Statistics

	Tolerance	VIF
PE	0.752	1.330
EE	0.545	1.836
SI	0.963	1.038
FC	0.625	1.599

Meanwhile, this can be confirmed by examining the Tolerance and variance inflation factor (VIF) values. According to Pallant (2020), a tolerance value of more than 0.10 or a VIF value smaller than 10 indicates the absence of multicollinearity. Referring to Table 4.5, all the Tolerance values shown were higher than 0.10, whereas VIF values were smaller than 10. This is in line with the results of the correlation coefficients, indicating that the data do not have the issue of multicollinearity.

4.5 Research Question 1: What are the factors that influence ESL lecturers' behavioural intention in adopting flipped learning?

4.5.1 Multiple Linear Regression

The first research question considered whether the behavioural intention of ESL lecturers in adopting flipped learning (dependent variable) was significantly affected by the independent variables, which included PE, EE, SI, and FC. This was done through the analysis of multiple linear regression that investigates how well each independent variable gives rise to the prediction of behavioural intention in adopting flipped learning. The R square value and statistical significance of the results are illustrated in Table 4.6, while the coefficients results are presented in Table 4.7.

Table 4.6*Model Summary*

R Square	Adjusted R Square	Sig.
0.516	0.471	0.000

Table 4.7*Coefficients Results*

Independent Variables	Unstandardized Coefficient	Sig.
(Constant)	-1.504	0.079
PE	0.564	0.002
EE	0.036	0.842
SI	0.097	0.474
FC	0.612	0.002

According to Pallant (2020), R square signifies the percentage of the dependent variable's variation that the model accounts for. As illustrated in Table 4.6, the R square value of 0.516 inferred that there was 51.6% of the variance in behavioural intention of adopting flipped learning that could be explained by the four independent variables. These included PE, EE, SI, and FC, as indicated in the table above. Furthermore, the significance p-value of 0.000 did not exceed 0.05, suggesting that the model is statistically significant.

Looking at Table 4.7, the summarised coefficients results showed that the significance values for performance expectancy and facilitating conditions were smaller than 0.05. This means that both performance expectancy and facilitating conditions significantly affect the behavioural intention of ESL lecturers in adopting flipped learning. Since the significance values for effort expectancy and social influence were greater than 0.05, these variables do not have a significant impact on the behavioural intention of ESL lecturers in adopting flipped learning. Moreover, the positive unstandardised coefficient values revealed that the relationships between the significant factors (performance expectancy, facilitating conditions)

and the behavioural intention of ESL lecturers to adopt flipped learning are positive. To be specific, for every unit of increase in performance expectancy, the behavioural intention of ESL lecturers in adopting flipped learning will increase by 0.564 units. On the other hand, the behavioural intention of ESL lecturers in using flipped learning will increase by 0.612 units when there is one unit of increase in facilitating conditions. Notably, facilitating conditions is the strongest factor that affects the behavioural intention of ESL lecturers to utilise flipped learning, followed by performance expectancy as the second strongest factor that influences the ESL lecturers' behavioural intention in adopting the flipped approach.

In accordance with this information, the prediction equation formed would be:

$$BI = \text{constant } (-1.504) + (0.564 \times PE) + (0.036 \times EE) + (0.097 \times SI) + (0.612 \times FC)$$

4.5.2 Testing of Hypotheses

H1: Performance expectancy (PE) significantly influences ESL lecturers' behavioural intention in adopting flipped learning.

Performance expectancy has a p-value of 0.002, which is not more than 0.05. This shows that it has a significant impact on ESL lecturers' behavioural intention in adopting flipped learning.

Hence, this hypothesis is accepted.

H2: Effort expectancy (EE) significantly influences ESL lecturers' behavioural intention in adopting flipped learning.

As effort expectancy has a p-value of 0.842 which is higher than 0.05, it does not significantly influence the behavioral intention of ESL lecturers in adopting flipped learning. With this, this hypothesis is not accepted.

H3: Social influence (SI) significantly influences ESL lecturers' behavioural intention in adopting flipped learning.

With a p-value of 0.474, social influence has a higher significance level than 0.05. This signifies that it does not significantly influence the behavioral intention of ESL lecturers in adopting flipped learning. Therefore, this hypothesis is not accepted.

H4: Facilitating conditions (FC) significantly influence ESL lecturers' behavioural intention in adopting flipped learning.

With a p-value of 0.002 which is smaller than 0.05, facilitating conditions significantly influences the behavioral intention of ESL lecturers in adopting flipped learning. To put it differently, this hypothesis is accepted.

4.6 Summary of Research Question 1

To summarise, the analysis based on the questionnaire survey indicated that there are two factors that affect ESL lecturers' behavioural intentions in adopting flipped learning, among which are performance expectancy and facilitating conditions. Specifically, unstandardised coefficient values obtained from multiple linear regression has shown that facilitating conditions is the strongest factor that can predict the behavioural intention, followed by performance expectancy.

4.7 Research Question 2: How do ESL lecturers perceive the adoption of flipped learning?

The second research question focused on exploring the perception of ESL lecturers towards the adoption of flipped learning. Based on the thematic analysis of the interview data collected from five ESL lecturers, there are pros and cons to the implementation of flipped learning. In fact, the responses gained from the participants can be categorised into two main themes, including advantages of flipped learning and issues that influence the adoption of flipped learning. Each of the themes is discussed in this section.

4.7.1 Advantages of Flipped Learning

Figure 4.6

ESL Lecturers' Perception of the Advantages of Flipped Learning

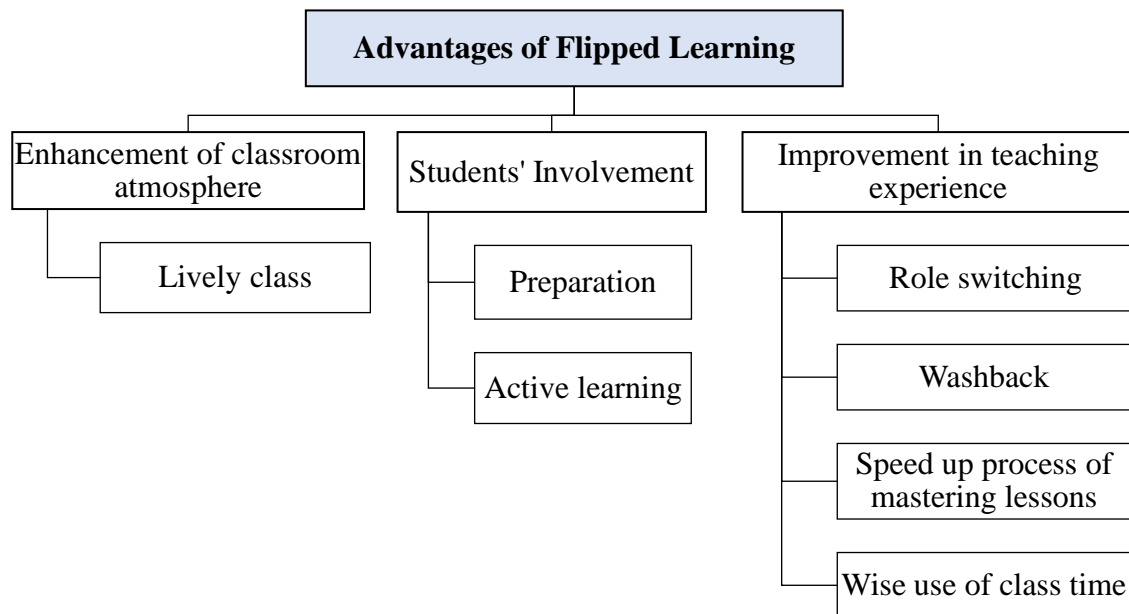


Figure 4.6 displays the summary concerning ESL lecturers' perceptions of the advantages brought by flipped learning. In general, the participants had a favourable attitude toward flipped learning, stating that it is a good teaching method. One of the key points involved is enhancing the classroom atmosphere. This idea is particularly derived from the opinions of Participant 1 and Participant 4 in which they claimed that flipped learning made the class interesting. To clarify, Participant 1 who had some experience adopting flipped learning in teaching, mentioned *"flipped learning is an actually interesting approach that you [the educator] can use, right, especially with nowadays we have all these 21st century learning, PAK 21 whatever not... The pro is that you make the class lively."* Similarly, Participant 4 contrasted flipped learning with the traditional teacher-centered method that would make the learners and the teachers feel bored. While giving responses, Participant 4 stated that *"So, the most basic factor for this [flipped learning] is to avoid all the, you know, boredom and so on."*

Additionally, flipped learning involves the students actively in the entire learning process. This includes before and during the class. As stated by Participant 1, *“You make the students always, you know, ready...”*. Likewise, Participant 3 asserted that *“they [the students] can engage what the lecturer going to teach during the class, so at least it will make them well prepared.”*. Both the responses focus on the statement that flipped learning prepares the students before attending classes.

Another point concerning students’ involvement would be the students’ participation during the class. It is noteworthy that flipped learning promotes active learning, as stated by Participant 2. According to Participant 2, *“... you [the educator] are making the students to be an active learner. They themselves have to participate in the learning processes.”*. While comparing flipped learning with the traditional way, Participant 2 also added that *“you will definitely be able to obtain the participation from the students because they have to make sure that they read the lecture notes, they understand the lecture notes because it will be used during the discussion.”*. Similar responses were also provided by Participant 4 and Participant 5. To explain, Participant 4 pointed out that *“...with a method like flipped teaching, I guess everybody [the students] has to know something. Everybody has to contribute something to the lesson.”*. These quotes emphasise the benefit of flipped learning in encouraging the students’ involvement.

Next, flipped learning is beneficial in terms of improving the teaching experience. Two participants had the opinion that teaching became easier as the role of educators changed in flipped learning. According to Participant 1, as shown in the quote below, flipped learning makes teaching easier to a certain extent.

“Let them [the students] do the process, the teaching and learning process whereby I’m just to, to facilitate, to make sure that whatever their discussions are still within

the topic, within the syllabus and all that. So, in a way, yes, it does make my teaching easier...”

Meanwhile, Participant 2 expressed a similar view on how role switching in flipped learning eases the teaching process. In the response given, it was stated that *“of course being the teacher you will be the facilitator. So, it will uhm... in a way reduce the burden of the teacher, rather than being the provider of the knowledge.”*

Interestingly, the participants opined that flipped learning is beneficial to their teaching as it provides washback, helps to speed up the process of mastering the teaching content due to repetition, and allows the wise use of class time. As mentioned by Participant 2,

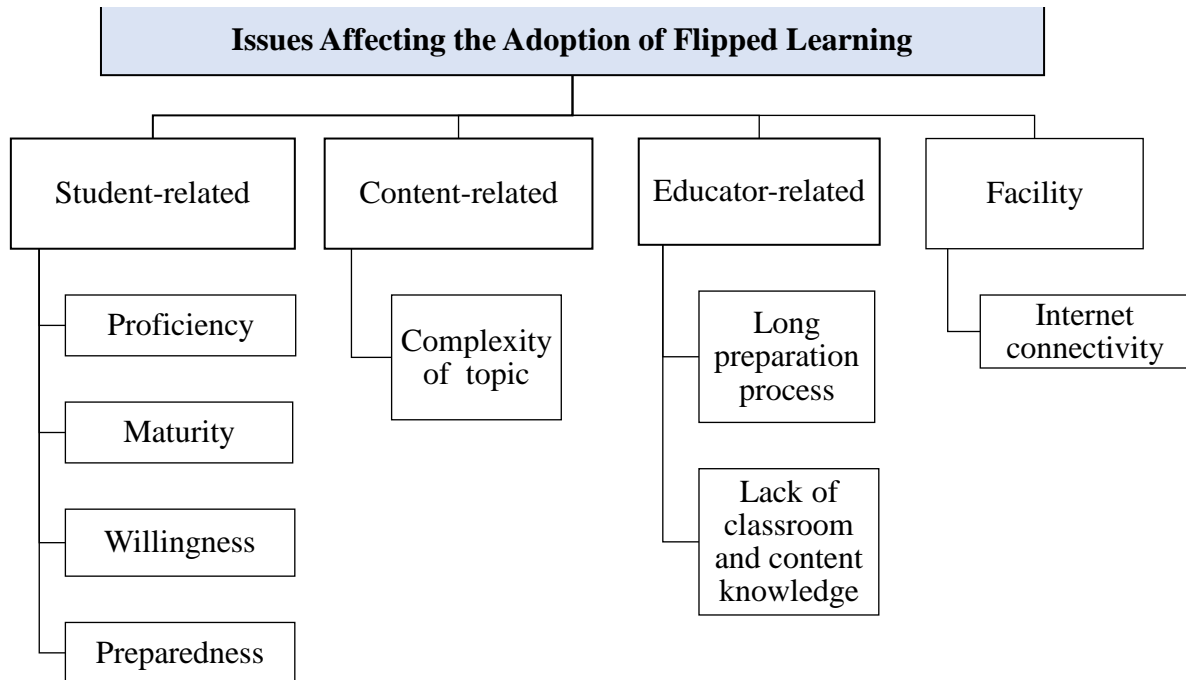
“Flipped learning would be able to provide washback, would be able to provide feedback regarding my teaching and also the students’ learning. Because judging from the discussion, I can see whether uhm... the students are able to understand what they have learned or not, from the discussion.”

As for Participant 4, it is stated that *“...when we implement flipped teaching, it will help us. I mean it will speed up the process for us to master the lesson, the syllabus.”* In fact, Participant 5 also suggested that flipped learning can help to make good use of time rather than restricting to the classroom setting and schedule. Thus, she said that *“We don't spend more time, uh... not to say waste the time, but unnecessarily spending time explaining things which we can do when we flip the class.”*

4.7.2 Issues Affecting the Adoption of Flipped Learning

Figure 4.7

ESL Lecturers' Perception of the Issues Affecting Their Adoption of Flipped Learning



Apart from the advantages, the participants also expressed their views concerning the issues that they would consider in their adoption of flipped learning. This can be discussed through four subthemes, as illustrated in Figure 4.7. Firstly, the participants predominantly proposed student-related issues, including the students' English proficiency levels, willingness to prepare for class discussions, their maturity, and whether they are prepared for flipped learning. To explain, Participant 1 had the opinion that flipped learning is only applicable to a certain group of students. This can be further explained through the given response, which stated that *“to certain group of students it [flipped learning] may cause trouble... especially those who are from, you know, like language I would say no proficiency, like beginner, intermediate, somehow they may encounter situation in this part.”*. In this case, Participant 2 had the same standpoint, mentioning that English proficiency is an important issue to be considered in flipped learning. This can be seen in the quote saying, *“the proficiency level, the*

English language proficiency level... when it comes to discussion, the students discuss using English, so their ability to speak well in English.”.

Moreover, Participant 2 also brought the idea of the students’ ability in class participation. The reply given to the factor that can affect the usage of flipped learning was “... *the maturity of the students. Whether sometimes the students are mature enough to handle the discussion or to even to start a discussion.”.* Moving on, Participant 3 mentioned that “... *there are chances for the students not to watch the videos before they come into class, so that's going to affect my teaching.”* This brings forward another student-related issue, which is their willingness to be ready before class. Lastly, the responses gathered from Participant 2 and Participant 5 suggest the importance of students’ preparedness. The response given by Participant 5 was “*Since the major stakeholders in my work would be students, if they don't welcome it, that would be a very big deciding factor for me.”.* This clearly demonstrates that students’ acceptance of flipped learning is crucial in determining the adoption of the approach.

The second theme would be the content-related issues. Two participants (Participant 1 and Participant 2) perceived the content or topic as an important issue in adoption of flipped learning. To be specific, Participant 1 provided an example by saying:

“If the topic is like cause-and-effect essay, then maybe I can, you know, start with the whole writing process, get them to write an essay. Like flip it at the end and we discuss... But for topics like proofreading or uhm... APA referencing, I won't be considering flipped classroom. The topic requires me to explain in detailed first.”

Identically, Participant 2 asserted that “*there are certain topics or there are certain areas that we can use it as you know, like discussion, things that are opinion-based, OK. But when things are facts, you know, factual, uhm... there is no room for a discussion.”.*

The third theme is educator-related issues, and it is supported by the responses from Participant 1, 3, 4, and 5 which put emphasis on the preparation process. Participant 1 stated that *“I need to spend a little more time on it... prepare all the materials beforehand. All the questions I'm going to ask, all the handouts that I'm going to use beforehand, so everything has to be well prepared...”*. Besides, Participant 3 described the preparation process of flipped learning by saying *“it's tedious because we have so many other works to be done and uh recording ourselves, recording is not easy.”*. Participant 4, by the same token, mentioned that *“we [lecturers] need more effort. We need more time.”*. In fact, Participant 5 asserted that *“The effort was quite challenging because I'm not from the digital native generation...”*. Referring to these quotes from the participants, using flipped learning might require extra time and effort from the lecturers.

Nonetheless, the issue does not seem to necessarily influence the adoption of flipped learning because Participant 2 felt it was not that difficult to use the approach, provided that a teacher is knowledgeable about a particular content or subject. As a matter of fact, Participant 5 also mentioned *“Learning at the beginning was challenging, but later the necessity made it a requirement. And now I actually enjoy using it.”*

Another point worth mentioning in the educator-related subtheme is a lack of classroom knowledge. As stated by Participant 1, *“if you don't have the experience, you don't have the knowledge about the classroom, the knowledge about your topic and whatnot, it can be such a hassle.”* In this regard, the participants brought forth the importance of training provided concerning flipped learning. As mentioned by Participant 1, *“If I would to receive that kind of training, that kind of support, then most definitely I'll consider to have flipped learning in my class”*. In fact, Participant 4 and Participant 5 also recognised the importance of training. This

is shown through Participant 4's reply which was "*It [Providing training] is an important thing to do. I mean, stakeholders or anybody involved.*"

The fourth theme is about facility. This is specifically derived from the opinion of Participant 3 which puts emphasis on the Internet connectivity of the students. Participant 3 pointed out the issue as a hindering factor for adopting flipped learning, saying that:

"it's not all homes are equally supportive for students. You know, we don't know, I can come up with flipped learning but we don't know whether the students have enough of data to watch the video, download the video and all those things."

4.8 Summary of Research Question 2

In brief, the data gathered from the interview has shown that the participants perceived flipped learning positively. To enumerate, they said that the flipped learning approach is beneficial in making class lively and interesting. Meanwhile, it prepares the students before attending class and shapes them to be active learners. It also improves the teaching experience in several ways. Nevertheless, the participants also raised their concerns relating to the issues that could affect their adoption of flipped teaching. These include student-related issues, content-related issues, educator-related issues, as well as the lack of facilities for students to access materials given outside classrooms.

4.9 Summary

This chapter has clearly outlined the findings gained from the survey questionnaire and semi-structured interviews. Referring to the analysis, it was found that both performance expectancy and facilitating conditions are factors that significantly impact the behavioural intention of ESL lecturers, while effort expectancy and social influence do not. As was pointed out in the findings of the interview data, flipped learning is beneficial in enhancing the classroom atmosphere and students' learning while improving the teaching experience of the

lecturers. Nonetheless, there are several issues discovered which could affect the usage of flipped learning, among which are student-related issues, content-related issues, educator-related issues, and facility issues. A more detailed discussion concerning the results is given in the subsequent chapter.

CHAPTER 5

DISCUSSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter highlights the discussions of the findings of the current research that were presented in the previous chapter. The discussions of the questionnaire survey and interview sessions are presented in Sections 5.2 and 5.3, with reference to the past research studies. In the sections that follow, limitations, implications of the study and recommendations for the future research are provided. A conclusion is presented in the last section of the chapter.

5.1 Discussions

In respect of the findings shown in Chapter 4, two hypotheses proposed earlier are accepted. To clarify, performance expectancy and facilitating conditions are shown to have significantly influenced the behavioural intention of ESL lecturers to use flipped learning. On the other hand, another two hypotheses are rejected as the statistical analysis indicated that effort expectancy and social influence do not influence the ESL lecturers' behavioural intentions in adopting flipped learning significantly. Hence, the following section provides a detailed discussion corresponding to the four factors while looking into why each factor affects or not affects the lecturers' behavioural intention in adopting flipped learning. While the interviewed participants expressed a positive view on the use of the flipped approach, they also pointed out several issues that could affect the adoption of the approach.

5.2 Discussions of the Questionnaire Survey

The first research question of this research sought to explore the factors that affect ESL lecturers' behavioural intention in adopting flipped learning. To answer this research question, a questionnaire survey was collected from 48 ESL lecturers who are currently working at private higher educational institutions in Malaysia. Correlation analysis and multiple

regression analysis were carried out to scrutinise the relationships between performance expectancy (PE), effort expectancy (EE), social influence (SI), and behavioural intention (BI). According to the results of multiple regression analysis, it was shown that performance expectancy and facilitating conditions are factors that can predict ESL lecturers' intentions to implement flipped learning. In contrast, there was no sufficient evidence that effort expectancy and social influence could predict the intention of ESL lecturers to adopt flipped learning, even though effort expectancy was discovered to be related to behavioural intention.

5.2.1 Performance Expectancy

Based on the statistical analysis, performance expectancy is a significant factor that influences ESL lecturers' behavioural intention in adopting flipped learning. Specifically, every unit of increase in performance expectancy would lead to an increase of 0.564 units in the behavioural intention of ESL lecturers. Although performance expectancy was not shown to be the strongest predictor in this study, the results imply that the usefulness of flipped learning towards the teaching and learning process is a crucial deciding factor for the lecturers to integrate flipped learning. This is in parallel to the research conducted by Long et al. (2018), which indicated that performance expectancy is a strong contributing factor to the decision of higher education instructors to utilise flipped learning. Not only this, a qualitative study by Bakheet and Gravell (2020) also reported similar results, as majority of the participants showed high agreement towards the role of performance expectancy in influencing their intentions to adopt the flipped classroom. In fact, this can be explained by the proven effectiveness of flipped learning. To illustrate, the flipped classroom method is shown to be useful in promoting active learning among university students in English speaking classes (Tazijan et al., 2017). According to Nwaizugbu and Wordu (2022), the flipped learning approach helps to increase students' engagement and academic performance and concurrently speeds up the completion

of course outlines. Most importantly, the approach serves as a model that can support student-centered learning in higher education (Nouri, 2016).

5.2.2 Effort Expectancy

Although effort expectancy was reported to have a moderate relationship with behavioural intention in this study, multiple regression results stated that it does not have a remarkable impact on the ESL lecturers' behavioural intention to use flipped learning. Rahman et al. (2021) also examined the intention of ESL lecturers to use flipped learning, and it was reported that effort expectancy is not a significant predictor. This shares the same results as the current study. As a matter of fact, blended learning has become a trend in the education field after Covid-19 pandemic, regardless of education level (Harida et al., 2022). To put it differently, lecturers are expected to have become familiar with the practice, and they have a certain degree of knowledge about the use of the Internet and media in teaching and learning. Since technological competence has turned out to be a requirement (Koehler et al., 2007, as cited in Rahman et al., 2021), effort in learning how to execute a flipped approach should not be a deciding factor in the adoption. Not to mention, it is claimed that the effort taken in learning how to use the approach is beneficial in the long term (Bakheet & Gravell, 2020). This means that the lecturers will use flipped learning even though it may take some time, provided that it is effective for their teaching. This also explains the findings which showed that performance expectancy significantly affects the lecturers' adoption of flipped learning but not effort expectancy.

5.2.3 Social Influence

As shown in the analysis results, social influence does not significantly impact the intention of the ESL lecturers to implement flipped learning as its significance value was greater than 0.05. This finding does not coincide with the results as reported by the previous research. According to the study by Rahman et al. (2021), the behavioural intention of ESL

lecturers to use flipped learning was significantly affected by social influence due to the ease of sharing resources among faculties. In this sense, one possible explanation that can be made is that the participants in this study are from private universities, whereas the target groups in the past study are working at public universities. As stated by Sohail and Daud (2009), the knowledge sharing culture in public and private higher education institutions can be affected by different factors. Since there are also numerous subjects in an English language course, sharing resources among the lecturers can be difficult. Besides that, the present findings contrast with the research conducted by Bakheet and Gravell (2020) that recognised the role of social influence in predicting the instructors' intention to use flipped learning. However, flipped learning is not a one-size-fits-all approach (Du, 2018), and this implies that teaching content would be given more importance by the lecturers compared to the opinions of their colleagues.

5.2.4 Facilitating Conditions

Results of the analysis revealed that facilitating conditions has a significant influence on the behavioural intention of ESL lecturers to employ flipped learning. To specify, a unit of increase in facilitating conditions would result in 0.612 units of increase in the behavioural intention of ESL lecturers to employ flipped learning. This differs from Rahman et al.'s (2021) study, which discovered that the impact of facilitating conditions was not significant. Nonetheless, a qualitative study by Bakheet and Gravell (2020) proposed similar findings, suggesting the significance of facilitating conditions in predicting the adoption of flipped learning. As reported, the success of the flipped classroom requires not only conceptual knowledge but also technical skills and pedagogical competence (Marca & Longo, 2017). In other words, educators should be equipped with all the necessary skills to employ this teaching method effectively. Proper guidance is especially needed for those who are not ready (Alebrahim & Ku, 2019). Not to mention, insufficient school support is known as a deterring

factor in the adoption of flipped learning (Ming, 2010, as cited in Hashim & Shaari, 2020). This further emphasises the importance of training or assistance provided in predicting the intention of lecturers in using flipped learning.

5.3 Discussions of Interview Sessions

The second research question investigated how ESL lecturers perceive the adoption of flipped learning. With this intention, five ESL lecturers who participated in the questionnaire survey were selected randomly for a semi-structured interview. After obtaining permission, interview sessions were conducted online or face-to-face at the participants' convenience. They were asked to provide their opinions about flipped learning and issues that exerted influence on their decisions to use flipped learning.

Generally, all the participants acknowledged that flipped learning is a good teaching approach. Two mentioned that flipped learning fosters an interesting learning environment. To clarify, it is well suited to 21st century learning as it makes class lively. Participant 4 also claimed that flipped learning helps prevent boredom. Referring to a study done by Yusuf and Taiye (2021), flipped learning is posited to be able to alter the typical learning environment as it offers possibilities for students to acquire skills that are essential for 21st century learning. For instance, higher-order thinking skills (HOTS) and problem-solving skills. Moreover, it is reported that a flipped classroom model can improve the learners' attention (Marca & Longo, 2017). This supports the idea that flipped learning prevents boredom because inattention is a cause of boredom (Wasson, 1981, as cited in Marca & Longo, 2017).

Another notable advantage of flipped learning is closely linked to the students' involvement. Two of the participants suggested that flipped learning allows the students to be well prepared for class discussions. This corroborates with the perspective of 13 undergraduate students who participated in a study carried out by Zainuddin and Attaran (2016). To explain,

they proposed that flipped learning provides ample time for them to understand a particular topic in a subject. In addition to this, majority of the participants in the current research asserted that flipped learning can develop active learners. They explained that a flipped learning approach would encourage the students to participate in class because they must prepare and contribute to the lessons. It is a known fact that flipped learning can promote active learning because it increases the discussion time and interaction between the students and the instructor during lessons (Sukerti et al., 2020). Reduced lecture time in class allows students, particularly those who are more introverted in their learning, to receive more personal engagement or assistance from the teacher (Roehl et al., 2013).

Next, the responses gathered from the semi-structured interviews also pointed out how flipped learning benefits the lecturers in terms of teaching experience. To illustrate, Participants 1 and 2 expressed their views about the changing role of educators due to flipped learning. Instead of being the knowledge provider, educators act as facilitators who aid students' learning in the classroom. To put it another way, educators spend little time explaining the topic in class while providing the students with freedom in their learning. Relatively, it is noteworthy that a participant conveyed the idea of wise use of class time. Based on the opinion of the participant, implementation of flipped learning can reduce the restrictions of the classroom setting, and she does not need to spare extra time explaining things that can be acquired by the students themselves. This is similar to the notion given by Wang (2017). According to Wang (2017), the integration of ICT into flipped learning enables educators to make better use of class time, and this provides more time for them to complete necessary tasks in class.

Not to mention, Participant 2 stated that flipped learning improves the teaching experience as it provides washback. To clarify, students' performance during discussions in class allows the lecturer to know if the learning objectives have been achieved. As presented by the proponents of flipped learning, this approach increases the knowledge of teachers about

their own students (Bergmann & Sam, 2012). Interestingly, Participant 4 also talked about the way flipped learning speeds up the process of mastering the syllabus or lessons. This is identical to the viewpoint of a practitioner who took part in a qualitative study done by Bakheet and Gravell (2020). It is stated that flipped learning enhances job performance as it enables the teacher to revise the knowledge regarding certain subjects and further explain the concept to the students.

Despite the advantages of flipped learning, the participants also showed their concerns about the issues that would affect their adoption of flipped learning. Nearly all of them pointed out student-related issues. Participants 1 and 2 mentioned that students' language proficiency level is something that should be considered because discussions will be done in the English language. In the same vein, a participant stated that her decision to adopt flipped learning depends on the maturity of students in handling discussions. Bearing this in mind, researchers Vitta and Al-Hoorie (2020) highlighted the challenge of flipped learning for less proficient students. Since the students are expected to understand the given materials independently, those with lower language proficiency may encounter difficulties with flipped learning.

Apart from this, the willingness of students is also emphasised in one of the participant's responses. It is said that lessons can be affected if students are not prepared beforehand. Based on Mehring (2018, as cited in Vitta & Al-Hoorie, 2020), for flipped learning to be successful, the students themselves must take the initiative and be responsible for understanding the new content prior to attending class. Following the responses given, two participants also considered the issue of students' preparedness for the teaching approach. This involves the readiness of students to adapt to the new learning approach by becoming self-regulated learners.

In terms of content, there were two participants who perceived the complexity of topic

as a deciding factor. As mentioned, some topics require a detailed explanation from the instructor, whereas certain topics dealing with facts are not suited to discussions. Apparently, not all topics are suitable to be taught via flipped learning, and this is supported by Evans (2012, as cited in Franci, 2014).

Although participants claimed that flipped learning improves the teaching experience, they were also concerned about the time required for material preparation. To point out, Participants 1 and 4 had the opinion that flipped learning requires more time and effort, while Participant 3 described preparing and recording videos as a tedious process. Likewise, Participant 5 also said that using flipped learning was challenging due to the use of technology. In fact, these responses tally with the results reported by Bakar et al. (2018), which indicated time as a concern for the implementation of flipped learning. Indeed, using the flipped learning approach can be difficult because it necessitates the creation of high-quality videos and materials (Halili & Zainuddin, 2015, as cited in Yavuz & Ozdemir, 2019). Nevertheless, Participant 2 took a different stance by stating that using flipped learning was easy with sufficient content knowledge.

Lastly, Participant 4 revealed Internet connectivity as an issue that could influence the adoption of flipped learning as students need to have access to technology in order to watch the videos that are given online. This is especially relevant to the Malaysian context. According to Chung et al. (2020), one of the biggest issues that Malaysian students have to deal with is poor internet access. Considering all the responses provided by the five participants, there are both positive and negative sides to flipped learning, and these answered the second research question on how ESL lecturers perceive the adoption of flipped learning.

5.4 Limitations to the Study

It is important to realise that this research was limited by the selection of higher education institutions and the small number of participants involved. To be clear, only 48 ESL lecturers were included, and the universities involved were in Peninsular Malaysia. As a matter of fact, there are more ESL lecturers from other private higher education institutions not involved in this study. Consequently, the results gained from this study were not able to be generalised to the entire population of ESL lecturers who work in private higher education institutions. Besides, the working environment, such as organisational culture and students' learning preferences, would differ in different universities. By including a greater number of participants from various higher education institutions, more comprehensive findings may be produced.

Another limitation of the study is that the interviewees who participated in the semi-structured interview were from the same higher education institution. In regard to this, bias can occur, and the researcher may not be able to obtain diverse views from the participants due to their identical working settings.

5.5 Implications of the Study

Previous recent research which employed UTAUT as a theoretical lens found that only social influence was a significant predictor of ESL lecturers' intention to use flipped learning (Rahman et al., 2021). However, the findings of the current study yielded a different result. It is shown that performance expectancy and facilitating conditions are significant in determining the ESL lecturers' adoption of flipped learning. On the other hand, social influence and effort expectancy are non-significant predictors. Clearly, the usefulness of flipped learning is confirmed, and sufficient knowledge and resources play a vital role in driving lecturers' intention to adopt the teaching approach. This data provides insights to stakeholders as well as private higher education institutions planning to implement flipped learning. As such, training

programmes can be conducted to equip lecturers with the skills or knowledge required for flipped learning.

Additionally, the findings in relation to the perception of ESL lecturers are useful for educators in the field of English teaching. To put it another way, the responses have further confirmed the benefits of flipped learning in different aspects. Not to mention, the findings pinpointed issues that should be taken into consideration before adopting a flipped approach. This not only serves as a guideline for educators who intend to incorporate new teaching methods into their teaching, but also for those who are using the approach to enhance their teaching pedagogies. Finally, the present findings also contribute to the current literature regarding flipped learning. This is because this study focused on the perspectives of lecturers from private higher education institutions, which were not addressed in the previous study.

5.6 Recommendations

As explained earlier, the findings of this research are not able to represent all ESL lecturers who work in private higher education institutions because it involved a limited number of institutions and participants. Thus, it is recommended that future studies replicate the research by having a greater sample size. More private higher education institutions should also be considered, including those in East Malaysia. Furthermore, the semi-structured interview that is conducted should entail participants from different private higher education institutions. This can avoid the occurrence of bias while ensuring the data collected is comprehensive.

Although having participants with different ages or backgrounds allows the researcher to gain diverse views, future research should consider a comparative study which involves a group of ESL lecturers who are new to the adoption of flipped learning and a group with experience using flipped learning. This would help to find out the factors that affect the

adoption of flipped learning while looking into the differences between two groups of ESL lecturers.

5.7 Conclusion

This research primarily aimed to study the factors that can affect the behavioural intention of ESL lecturers in utilising flipped learning. Moreover, it sought to explore how ESL lecturers perceive the adoption of flipped learning. 48 ESL lecturers from five higher education institutions were involved in the research. In fact, a questionnaire survey and semi-structured interviews were conducted to gather the data.

Statistical analysis conducted has identified two factors that significantly affect the intention of ESL lecturers to use a flipped approach, namely performance expectancy and facilitating conditions. Furthermore, the collected data from the semi-structured interview indicated that the lecturers had positive viewpoints towards the flipped learning approach. It was mentioned that the approach helps enhance students' learning and class atmosphere, as well as improve teaching experience. However, issues related to students, content, educators, and facilities were discovered to impact the adoption of flipped learning.

The findings mentioned above are critical as they provide clear understanding to the stakeholders who intend to employ flipped learning in their higher education institutions. With the confirmation of the importance of adequate knowledge towards flipped learning adoption, higher education institutions should provide the necessary support in encouraging the use of flipped learning. As the present findings cannot be generalised to all ESL lecturers from private higher education institutions in the country, future research was suggested to repeat the study with a greater number of participants from various private higher education institutions. A comparative study was also recommended, with the purpose of investigating the difference

between factors that can influence the adoption of flipped learning among ESL lecturers who have and have not used flipped learning.

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APPENDICES

Appendix A

Survey Questionnaire

Part 1: Demographic Questions

1. Gender

- Male
- Female

2. Age group

- 21-30 years old
- 31-40 years old
- 41-50 years old
- 51-60 years old

3. Race

- Malay
- Chinese
- Indian
- Other: _____

4. What is your highest level of education?

- Bachelor's Degree
- Master's Degree
- Doctorate Degree

5. How long have you been teaching at higher educational institution?
- 1-5 years
 - 6-10 years
 - 11-15 years
 - More than 15 years
6. Which private institutions are you working at?
- Universiti Tunku Abdul Rahman (UTAR)
 - Tunku Abdul Rahman University College (TARUC)
 - Quest International University
 - Xiamen University Malaysia
 - University of Nottingham Malaysia
7. How long have you been using flipped learning in your teaching?
- No and not planning to use
 - Not sure
 - Plan to use it
 - Using it currently
8. Have you ever attended seminar/course/training program concerning flipped learning?
- No
 - Plan to attend
 - Yes

Part 2: Factors Influencing Intention to Adopt Flipped Learning

The following statements are about the opinions on the use of flipped learning. For each of the statement, please indicate to which extent do you agree or disagree with it.

No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Performance Expectancy (PE)						
1.	I think Flipped Learning is useful for teaching ESL.					
2.	I think using Flipped Learning for teaching ESL will help to enhance engagement with students.					
3.	I think Flipped Learning will help to increase my effectiveness on teaching.					
4.	Using Flipped Learning will make my teaching easier.					
Effort Expectancy (EE)						
1.	Learning how to use Flipped Learning is easy for me.					
2.	I would find it easy to become skillful at using Flipped Learning for teaching ESL.					
3.	Using Flipped Learning for teaching ESL is easy for me.					
Social Influence (SI)						
1.	People who are important to me think that I should use Flipped Learning in teaching ESL.					
2.	I would use Flipped Learning in teaching ESL if my boss has encouraged using it.					

3.	I would use Flipped Learning in teaching ESL if most of my colleagues use it.					
Facilitating Conditions (FC)						
1.	I have the resources necessary to use Flipped Learning in teaching ESL.					
2.	I have the knowledge necessary to use Flipped Learning in teaching ESL.					
3.	There is a specific person (a group) available for assistance with any technical problem I may encounter regarding Flipped Learning.					
Behavioural Intention (BI)						
1.	I have intention to use Flipped Learning to teach ESL in the next three months.					
2.	I predict I would use Flipped Learning to teach ESL in the next three months.					
3.	I plan to use Flipped Learning to teach ESL in the next three months.					

Appendix B

Semi-structured Interview Questions

1. What are your thoughts about flipped learning in general?
2. Have you ever used flipped learning in your teaching? (fully flipped /partially flipped)
If yes, can you briefly describe the way you used flipped learning?
3. What issue/problem do you think would affect your decision to adopt flipped learning?
How?
4. Do you intend to use flipped learning in the coming future? Why?

Appendix C

Reliability Analysis

Performance Expectancy (PE)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.910	.912	4

Effort Expectancy (EE)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.866	.866	3

Social Influence (SI)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.720	.728	2

Facilitating Conditions (FC)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.711	.712	2

Behavioural Intention (BI)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.976	.976	3

Appendix D

Test of Normality

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PE	.196	48	.000	.919	48	.003
EE	.175	48	.001	.935	48	.011
SI	.206	48	.000	.921	48	.003
FC	.222	48	.000	.922	48	.004
BI	.218	48	.000	.901	48	.001

a. Lilliefors Significance Correction

Appendix E

Pearson's Correlation Coefficient

Correlations

		PE	EE	SI	FC	BI
PE	Pearson Correlation	1	.473**	.147	.317*	.573**
	Sig. (2-tailed)		.001	.318	.028	.000
	N	48	48	48	48	48
EE	Pearson Correlation	.473**	1	.001	.606**	.491**
	Sig. (2-tailed)	.001		.994	.000	.000
	N	48	48	48	48	48
SI	Pearson Correlation	.147	.001	1	-.070	.107
	Sig. (2-tailed)	.318	.994		.635	.471
	N	48	48	48	48	48
FC	Pearson Correlation	.317*	.606**	-.070	1	.586**
	Sig. (2-tailed)	.028	.000	.635		.000
	N	48	48	48	48	48
BI	Pearson Correlation	.573**	.491**	.107	.586**	1
	Sig. (2-tailed)	.000	.000	.471	.000	
	N	48	48	48	48	48

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix F

Model Summary of Multiple Linear Regression

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.718 ^a	.516	.471	.67642

a. Predictors: (Constant), FC, SI, PE, EE

b. Dependent Variable: BI

Appendix G

ANOVA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.972	4	5.243	11.459	.000 ^b
	Residual	19.674	43	.458		
	Total	40.646	47			

a. Dependent Variable: BI

b. Predictors: (Constant), FC, SI, PE, EE

Appendix H

Coefficients

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	-1.504	.835		-1.802	.079	-3.187	.179						
	PE	.564	.170	.406	3.319	.002	.221	.906	.573	.452	.352	.752	1.330	
	EE	.036	.179	.029	.200	.842	-.324	.396	.491	.030	.021	.545	1.836	
	SI	.097	.134	.078	.723	.474	-.174	.368	.107	.110	.077	.963	1.038	
	FC	.612	.184	.445	3.318	.002	.240	.984	.586	.452	.352	.625	1.599	

a. Dependent Variable: BI

Appendix I

Transcript of Semi-structured Interviews

Interviewer: Chew Zhi Jun

Interviewee: P1, ESL lecturer

Interview setting: Interview conducted through video call on MS Teams. Interview was conducted at 10 a.m. on Tuesday (05/07/2022).

[Begin Transcript 0:00:05]

Interviewer: First of all, what are your thoughts about flipped learning in general?

Interviewee: In general, uhm... I would say that flipped learning is an actually interesting approach that you can use, right, especially with nowadays we have all these 21st century learning, PAK 21 whatever not. So, it's actually a good approach. I mean it had been a long, had been in the field for a long time. Only that I would say that... it depends on the situation actually, even though uhm... I mean this what I see in flipped classroom is that... uhm... only to certain extent and to certain group of students. You can't use this for all groups of students. That's one of the issues that I encountered with. There's the pros and the cons. The pro is that you make the class lively. You make the students always, you know, ready and then ... ah... I need to come to your class and uhm... know that their opinion, whatever their thought when they shared a value. But at the same time to certain group of students it may cause trouble, both to them and also to the educators for the... I would say that for the student, uhm... especially those who are from, you know, like language I would say no proficiency, like beginner, intermediate, somehow they may encounter situation in this part. As for the educator, it requires uhm... a lot of preparation and if you don't have the experience, you don't have the

knowledge about the classroom, the knowledge about your topic and whatnot, it can be such a hassle.

Interviewer: Alright. Have you ever used flipped learning in your teaching?

Interviewee: Flipped learning... Uh, yeah, I did.

Interviewer: Is it fully flipped or maybe partially flipped?

Interviewee: Uh... I'm not sure about that actually, but I would say that I would just go with partial because this is really related to the subject I taught. I taught Academic Writing and also Philosophy of Education. So, for Academic Writing, uhm... I normally teach in FB. So with FBF, English is not their favourite subject, and it's never be favourite subject. And... so, when I want to use flipped classroom, I don't think it's going to work because I tried before, and uhm... I mean ... how should I say this. I can see they are prepared for the class, yes for sure, they are prepared for the class. But when it comes to write an essay, you need to know the format. You need to know all the technique thing. Alright? Even though these are the things they have learned in school, I don't know why, somehow in the class when I... you know, the role is being switched. They seem like ah... unsure of what to do, how to write an essay whatever. They really depend on the teacher. And then for subject like Philosophy of Education, I tried, in the past, hit-and-miss I would say. Because you know, with philosophy demands a lot more from the student.

Interviewer: Alright. OK, so, what factor do you think would affect your decision to use flipped learning in your teaching? Based on what you said just now, do you think proficiency of the students is the main thing that will affect your decision either to use or not to use flipped learning?

Interviewee: Uhm... to me there are several factors, but what you mentioned is definitely on the list. The students' proficiency is going to be the first one that I can see that when thinking about flipped classroom. Number 2 is uhm... the topic itself, you know, the kind of topic that I'm going to teach. If the topic is like cause-and-effect essay, then maybe I can, you know, start with the whole writing process, get them to write an essay. Like flip it at the end and we discuss, OK, this is what you have done. So the topic like that may work and can be... easy for them. But for topics like proofreading or uhm... APA referencing, I won't be considering flipped classroom. The topic requires me to explain in detailed first. Uhm... and then another factor I would consider is uh... my students. I mean my students in general, how they are in a classroom. You know, like last time it was in physical classroom. Are they the kind of like lively students, like very interactive, and ask questions if I were to assign them group work. Uhm... how would be in a group, how the dynamic was. So those are the factors that I can say as the top three. Other than that, maybe the size of the classroom, where it's going to be conducted. What else, the material perhaps? Usually those are the things that I consider when it comes to flipped classroom.

Interviewer: Alright, so, based on your experience, how do you feel about using flipped learning in improving your own teaching experience?

Interviewee: I would say, it's very good one. Yeah, it's a good one because number 1, I'm a new lecturer. I'm still fresh in the field. I only have, I mean have like 4 years of teaching experience. So of course in these 4 years I have, you know, experimented with certain type of teaching, you know, teaching approach, this methodology, this pedagogy in the classroom. It has given me an eye-opening experience to see how I can somehow switch up the classroom interaction, how I can play around

with the dynamic of the classroom or how I can make this student learn more, prepare more for my class. What else about it? Uh... it's an eye opening and also trial, see, you know, which one can work and because I was in my generation, it's always ah... I was taught in traditional classroom, you know like teacher come to the class teach, like chalk and talk, right?

Interviewer: Yeah. Yes.

Interviewee: Yeah. Yes, so that one. That was my generation. So, now that I'm in, being the educator myself, I can take the experience from the past and somehow figure out way to not make my student feel what I felt, you know, like I was bored in the classroom. Like even like for English classroom, what can I do you know. I had English teachers that, well, they didn't like practice flipped classroom. But what they did was they switched up the dynamic. Like instead of starting with essay writing, maybe we start off with listening to the song, and from the song we elaborate a little bit more, and then the students have to give their input and from the input, together we write a paragraph. So that's how I was taught in English lesson for that one year. Uhm...so those are the things that I can take from that. I will say that, yes, an eye-opening experience for me especially for a new lecturer. And also, an opportunity for me to explore. I think that's it.

Interviewer: Do you think flipped learning would make your teaching easier?

Interviewee: To certain extent because... I would say to certain extent it is easier because number one, my role is now... I won't say reduce. Reduce is not the word. I would say that my role is not too demanding in the way that I have to make sure you know, teach. When we say teach and facilitate, there are two different contexts that when I say teach, I have to be in the front and like "OK guys, ABC&D these are the things...". that are. But when I am the facilitator, the students be like OK

guys. A is this, B is this. And then my role is there just to facilitate and say, “Yeah, your friends are correct.” OK. And then I can like, “OK, what about you, Steven? What’s your thought on this part?” This kind of thing. Let them do the process, the teaching and learning process whereby I’m just to, to facilitate, to make sure that whatever their discussions are still within the topic, within the syllabus and all that. So, in a way, yes, it does make my teaching easier, but...uh, this is the part where it can be tricky, because you as a teacher, you have to be prepared all the time in the classroom. Let’s say the classroom is like, the lecture is 2 hours right, that two-hour lecture, you must make sure that you know every single aspect of the topic that you're teaching. Let’s say, uh... I teach cause and effect essay, and then in that class I want the students to write an essay first, and then the topic, to make it easier I would normally assign them. But when we assign the topic to the students, they don't really like it right? They feel like a lot of topics, this topic is boring whatever not. So, sometimes what I like is I give them the freedom to choose the topic. So when you give freedom to the students to choose the topic it means that you are opening door to so many possibilities. They may come up with... I mean they are not going to be taboo topic whatsoever, but they can come up with like DC versus Marvel. So when they proceed with that, and when they come up with their ideas, topic sentence whatsoever, and during discussion you need to somehow know whatever they are discussing, even though it’s just the example they provide. Like in DC, this character is like that, in Marvel this character is like that. So, when you compare... To me, yeah those are like very simple and of course I can just simply Google it, you know? But if I am not aware of that, it can be difficult. And let's say some students may ask in terms of the format. Because cause and effect there are two different types of format, right?

So the student can choose either one. So, when that happened, sometimes... uh... of course in the lecture you know, I will say that, OK, you need to choose only one. You cannot like, best not to mix them. But there will be students who like, Sir, what if I would like to combine these two together? Can I have like maybe paragraph one like that, paragraph two like this, paragraph three like that? So, for a new lecturer like me, you know and writing that really like my cup of tea. So I have to, like in a way I need to expect the kind of question that can be asked in the classroom, that kind of situation that may arise from those activities in the classroom, the kind of questions, ideas and topics that students may give. I think last week, I mean last week I didn't do like flipped learning, but I would say tutorial activity where the students have to simplify a sentence. You know? This sentence is taken from a general article. So, they have to change certain words using synonyms. When that happened, my answer script is already there. I only have one answer for each which they can be replaced. But I forgot the part where these students, they have different way of thinking. So, their interpretation and their way of simplifying those words are not going to be the same as mine. When I looked at that, it was the moment when I saw the answer written on the screen, and I was like OK, immediately I had to switch on my internal dictionary, you know, like, OK, can I paraphrase this word with this one? And I need to immediately think of OK, I'm not sure of this word. Can I use that? You know, won't show my weakness in the classroom. So, from that I have to throw back the questions to the students like, OK guys, what do you think of this one? You know? So it really somehow required the teacher to manipulate... Yeah, whatever skill they have just to make sure that things work accordingly, and so that the same

goes to flipped classroom. It's actually easy but to a new lecture, a new teacher, it can be quite difficult.

Interviewer: OK, alright. Just now we mentioned about the use of flipped learning in improving teaching experience and its role in making teaching easier or harder. So how do you think this would affect your decision to use or not to use flipped learning?

Interviewee: OK. Uh... I wouldn't say that I I'm going to 100% like say a definite no to flipped classroom because I would still want to use it, even right now I'm figuring out how I can include this technique in my teaching.

Interviewer: OK, so how was your experience regarding the effort that you need to learn how to use flipped learning?

Interviewee: OK. When it comes to effort, right, uhm... I need to spend a little more time on it, you know, first and foremost I need to understand like what is flipped classroom. You know, some people say you just basically take your classroom, you give them, you know, the material first and then after that uh... in the classroom, you do the discussion. Yes. When you say like that, it sounds very simple, but it involves certain types of preparation. You know, I mean, I can give, I can give them the lecture note. But at the same time, I need to also prepare all the materials beforehand. All the questions I'm going to ask, all the handouts that I'm going to use beforehand, so everything has to be well prepared so that when I come to class, it can be carried out successfully.

Uh, with regards to the effort before the classroom, yes, you need to do a lot of things. And then once you have done it, you get used to it and slowly you know how to play around with it. But at first it is not going to be easy especially for a new topic that you need to explore the content and so many things. Yeah.

Interviewer: So, uh... since you mentioned about you need to use more time if you use flipped learning, like in terms of preparation of the class. So, do you think this would affect your decision to use flipped learning?

Interviewee: Uh yes, definitely. Because you know, when it comes to teaching, yes, we have like here, for me example in this semester I have a lot of time gap. But in that time gap doesn't mean that my focus is only for the teaching part. I also have to do, you know, like research for my PhD and also need to do some administrative work, and then consultation with the students. Uh... plus here and there also I need to get to my own life. You know, my personal life. So, it involves a lot of time. I remember when you know, doing online class. When online class was started, but then we had PKP, that time it's not I was using, I was fully utilizing flip classroom, but certain part of it I tried to, like you said, partial flipped classroom kind of thing. That one really took a lot of my time where when I start, you know, work on all the materials. I didn't realize that I work from the morning like they say 8-9 all the way up to 12 a.m., 1 a.m. to, you know, make sure everything is ready. And that is for one class, for one lecture. So, imagine you have, like, let's say, a lot of topics. So, you need to figure out how to do it. But as I said, if you have like, you know like for the first time, it's going to involve a lot. It needs a lot of effort. But perhaps after that let's say for the following semester, if you're still teaching the same subject, then you can just recycle the material and manipulate in a way that it could be matched with the students for the current semester, their proficiency and whatsoever.

Interviewer: OK. Alright, moving on, do you think the opinions of your... your boss or maybe your superior, as well as colleagues would affect your decision in using flipped learning?

Interviewee: Uh... I wouldn't say like 100%, maybe... I would say like out of that 100% maybe just like 10% because if my boss, my superior or my colleague, you know, they have done or they have used this technique before in their classroom and they share. So, I mean I use flipped classroom in my class and this, this, this happened. If it was like positive experience, like my experience share positive experience, I might be like consider, oh maybe I can try that. Maybe I can ask this person, I know there's someone, there's somebody I can refer to. But if let's say this person is sharing something negative, you know, and say that oh you know when it comes to flipped classroom and online classroom can be quite hassle, this and that, I might reconsider my whole entire admission of having flipped classroom. Just like I had, you know, because of your mind when you're preparing for your lesson, I'll be like, OK, maybe this can work. This cannot work, and whatsoever. So about 10% it's going to affect my decision.

Interviewer: OK, alright. What about the existence of resources or support provided by the university? Let's say the university actually provides some support regarding the use of flipped learning, do you think this would also affect your decision to use flipped learning?

Interviewee: Uh support in terms of like maybe providing material? Or providing training or providing the facility?

Interviewer: Training, yes.

Interviewee: If the support comes in terms of training, then for sure I'll consider that because you know, flipped classroom, once you go through that, it can give you a new idea. We don't say flipped learning is a Google way, but still when you hear from a pro it has different meaning, you know, you can ask a lot of questions during

the training session. So, yeah. If I would to receive that kind of training, that kind of support, then most definitely I'll consider to have flipped learning in my class.

Interviewer: OK, alright. So, will you continue using flipped learning in your class in the coming future?

Interviewee: Depends. Depends.

Interviewer: OK, alright.

Interviewee: Depends on the topic, definitely.

Interviewer: OK, alright. I think that would be all for our interview session today.

Interviewee: Alright.

Interviewer: Thank you so much for your time.

Interviewee: No problem. I'm happy to help.

[End Transcript: 0:23:39]

Interviewer: Chew Zhi Jun

Interviewee: P2, ESL lecturer

Interview setting: Interview conducted face-to-face at office of the interviewee. Interview was conducted at 4:10 p.m. on Thursday (07/07/2022).

[Begin Transcript: 0:00:03]

Interviewer: First of all, what are your thoughts about flipped learning in general?

Interviewee: OK, uhm... the first time I thought flipped learning is actually you know, the usage of uhm... you know, technology, like all this online because I thought that flipped learning is actually you know, you flip from the traditional method to a new method. And when I thought about method, I thought the usage of you know... not using what we use normally use, using the whiteboard, is the chalk talk kind of thing. So, I thought flipped learning is actually using technology. But then when I got to know the real definition, flipped learning is basically you uhm... you have an earlier preparation for the students by providing them the material and then uh... during the class you have discussion, so you are flipping the roles of the students and the teachers' actually. So for the teachers, for the flipped learning, what I understand, in flipped learning, teachers are just facilitators. They are not knowledge provider. OK, I mean they are knowledge provider, but then it's the students they themselves. They have to also uh... try to uh... understand the knowledge because they need to know the knowledge in order for them to do the discussion. OK, alright, so basically that.

Interviewer: Alright, so after you understood the meaning of flipped learning, like how it works, so in your mind, are there any advantages or disadvantages?

Interviewee: OK, alright. Of course, uh... when you do this after knowing the definition of flipped learning, whereby it's actually consistent with what we called active learning. Meaning that uhm... you are making the students to be an active learner. They themselves have to participate in the learning processes, OK, compared to in a traditional way whereby uhm... you don't see... Well, it's not that you don't see, but you'll see a minimal effort from the students in the learning processes. OK. Alright, so, what I think now, is it? Uh... I think the advantages and disadvantages right? So, the advantages whereby it is good because now you are making the students as an active learner. Alright, so, you will, you will definitely be able to obtain the participation from the students because they have to make sure that they read the lecture notes, they understand the lecture notes because it will be used during the discussion. OK, so that is one of the advantages. And the second advantage, I would say that uhm... of course being the teacher you will be the facilitator. So, it will uhm... in a way reduce the burden of the teacher, rather than being the provider of the knowledge. So now in the discussion, uh the lecturer or the teacher will be the facilitator. Alright, because the active part of the lesson is going to be done by the students. OK. Uh... disadvantages, OK, uhm... it really depends on the maturity of the students and also the complexity of the topic, of the content. Because if I'm not mistaken, I have actually done this before without me knowing it. Alright? Because when we started the... this whole thing, alright, when we had the pandemic, the lecturers were asked to upload recorded video of the lesson in Wble. But then uh... during the lecture, we are not doing a discussion. We are actually lecturing the same thing that we have given. So, it defeats the purpose of flipped learning actually. OK. And then uhm... there were some students, when we have given the video lecture, the the recorded

lecture, uh... they decided not to be active during the lecture online. Alright? Because they have, I don't know whether they have watched the video or not, that is one issue. Alright, but then they think that after they watch the video it will be the same thing, so which is actually not a flipped learning la. So that is actually our fault. OK as a lecturer, because we are actually repeating what is recorded in the video. So, the disadvantages could be in terms of not getting the participation from the students because of the maturity of the students and the complexity of the content. So, that would be the disadvantages. OK, and then uhm... another thing would be, you know, sometimes the time. Two hours may not be sufficient for a discussion to take place. Uhm... to discuss about, if the content is very difficult or is very wide. OK.

Interviewer: Alright. Just now you mentioned that you've used flipped learning without you realising. Apart from that experience, is there any other experience whereby you integrate flipped learning in your teaching?

Interviewee: OK. I would say uhm... like what we are having, like lecture and practical. I would say our practical session is an example of flipped learning whereby the students are given questions to discuss which is actually related to the content of the lecture that they had earlier. Alright? So, I think, in the way where I understand the meaning of flipped learning, our practical sessions is a good example of flipped learning, even though we do not have the... you know, the recorded video or whatever is being given earlier. But at least it is covered during the lecture time.

Interviewer: So, the next thing, what factor do you think would affect your decision to use flipped learning?

Interviewee: OK. Uhm... of course the students. Uhm... under the students factor, it's basically the maturity of the students. Whether sometimes the students are mature enough to handle the discussion or to even to start a discussion. And then in terms of uhm... the proficiency level, the English language proficiency level. Alright, because uhm... when it comes to discussion, the students discuss using English, so their ability to speak well in English. Okay? Alright, and then uhm... in terms of another factor I would say in terms of the preparedness of the students, I think the teachers should be... should give training or maybe some sort like a practice to the students. Because I mean like it should be properly or formally introduced to the students, ok? So, in terms of the preparedness of the teachers and also of the students. And then another factor would be uhm... I would say in terms of the content itself, or the topic because there are certain topics or there are certain areas that we can use it as you know, like discussion, things that are opinion-based, OK. But when things are facts, you know, factual, uhm... there is no room for a discussion.

Interviewer: Alright. Do you think flipped learning would help to improve your own teaching experience? For example, it makes your teaching easier.

Interviewee: Yeah definitely, because you see, flipped learning would be uhm... would be how to say. Flipped learning would be able to provide washback, would be able to provide feedback regarding my teaching and also the students' learning. Because judging from the discussion, I can see whether uhm... the students are able to understand what they have learned or not, from the discussion.

Interviewer: So, do you think this would be a factor as well that affect your decision to use flipped learning?

Interviewee: Yeah yeah.

Interviewer: Alright. OK, so moving on, we talk about the effort needed for you to learn how to use flipped learning. So how was your experience regarding the effort needed to learn how to use flipped learning?

Interviewee: Hmm... Again again?

Interviewer: How was your experience regarding your effort needed to learn how to use flipped learning?

Interviewee: Hmm... I would say uh... I think it's not that difficult actually... to do flipped learning. Alright? Because if a teacher is knowledgeable about that particular content or subject, uh... doing flipped learning would be easy for that particular teacher because that discussion that will take place during the flipped learning is actually a reflection of the content. OK? I think it would be OK, and I think uhm... since I told you unintentionally, accidentally I was doing it, so I think it's OK. I think for somebody, for a teacher who has been teaching the subject for a long time, who is very knowledgeable, it will be a good experience and uhm... it will be very easy I think for that particular teacher.

Interviewer: Do you think this would affect your decision to integrate flipped learning?

Interviewee: Hmm... no.

Interviewer: Alright, so the next thing, do you think the opinions of your boss, superior as well as your colleagues would affect your decision to use flipped learning?

Interviewee: No, because I think that currently also you know, everybody is going for more student-centered kind of activities. So, this has been the core thing, the most important thing. So, the flipped learning, uhm... as we mentioned just now, it will involve active learning whereby it is one of the criteria of student centered. So, I don't think so, I mean all these big bosses will go against it. But if they go against it, if they ask me not to do it, I will say no, I will do it. Basically that.

Interviewer: Alright. OK. So, what about the support provided by the university? Let's say the university provides training regarding flipped learning, do you think this kind of training would affect your decision to use flipped learning?

Interviewee: Hmm...alright, uhm... of course when... it will affect if there is a training, and then if there's no training, I don't think so I will be able to do it because as I mentioned earlier, but actually I do know how to do flipped learning. So whether I have training or not, I will not affect. OK, it will not. It will not. OK, it will not.

Interviewer: So do you intend to use flipped learning in the coming future?

Interviewee: Of course. There are certain things uh... that could be used, that make me to agree to use flipped learning. But as I mentioned just now, the students is one of the factors. Alright? I find it easy for me to do flipped learning with my ED students because one is their proficiency of the language is there. But I find it a bit difficult to do it with my other students like students from uh... English for Business, English for Science or English for Management because of their proficiency level. And the fact that it was not me who do the lecture. You understand what I'm trying to say? Because like certain courses, I am the lecturer, so I am the one who is also doing the discussion. So, I know what can be asked or what can be discussed. But there are certain subjects whereby I'm just the tutor. Okay, so uh... I may not know what has been uhm... delivered in the lecture part. So basically that. So that would affect, you know.

Interviewer: OK. So, I guess that will be all for the interview today. Thank you so much for your time.

Interviewee: OK. No problem.

[End Transcript: 0:14:24]

Interviewer: Chew Zhi Jun

Interviewee: P3, ESL lecturer

Interview setting: Interview conducted through video call on MS Teams. Interview was conducted at 10 a.m. on Wednesday (13/07/2022).

[Begin Transcript 0:00:06]

Interviewer: First of all, I would like to ask, what are your thoughts about flipped learning in general?

Interviewee: My thoughts is it?

Interviewer: Yes.

Interviewee: OK. Can you define flipped learning first?

Interviewer: OK. So, flipped learning is an approach whereby the students undergo pre-recorded video lessons before class and involve themselves in exercises or practices during class time.

Interviewee: Hmm... OK, so that is your definition is it?

Interviewer: Yes.

Interviewee: OK. So, my opinion about that, uh... it is good because the students are at least uh... they can engage what the lecturer going to teach during the class, so at least it will make them well prepared. And but at the same time, uh... even though we have this pre prepared videos for them to watch right, there are chances for the students not to watch and come to class just like that. So there are pros and cons of flipped learning because uh... self-regulated learning is very important among students. That means they have to be in charge of their learning. OK, so that's my opinion. That's positive and that's negative, yes.

Interviewer: So, have you ever used flipped learning in your teaching?

Interviewee: Ah... not really.

Interviewer: OK. So, what are the factors that you think would affect your decision to use flipped learning?

Interviewee: As I say, there are chances for the students not to watch the videos before they come into class, so that's going to affect my teaching, yes.

Interviewer: OK. So, how do you feel about are using flipped learning in improving your teaching experience?

Interviewee: Come again? Can you repeat your question?

Interviewer: OK. How do you feel about the statement saying that flipped learning helps improving your teaching experience? Like for example, the usefulness about flipped learning. How flipped learning can help to engage the students, or increase the engagement in the class?

Interviewee: Hmm... I don't comment because I've not used it because we have uploaded you know, recorded videos previously, but no one watched it. So, I can't really speak about the engagement, yes.

Interviewer: OK, so do you think this would affect your decision in using flipped learning?

Interviewee: Uh, no.

Interviewer: OK. Alright, what about the effort needed for you to learn how to use flipped learning? Would you think it would be something easy or difficult for you?

Interviewee: Uh, the process itself, I think it's tedious because we have so many other works to be done and uh recording ourselves, recording is not easy. Recording a video because we are not supposed to make any mistakes and so on. So it may have done recording like only for five minutes, recording the whole class and uploading it prior before the class, before the students come in, right, I think it's going to be very tedious. And then just about the video is going to be one way

you know? So I personally I don't feel like so happy doing it in every class of mine, but probably it can be implemented in one or two classes, not all, because having the same style of teaching, that's going to demotivate the students because every student is different. Maybe some students, they are customized to flipped learning. They like they like. But maybe some students they do not like, so we cannot penalize them. You know, sometimes they do not learn better through this flipped learning. So in that case, uh... it's good to use flipped learning but not for the whole semester, all the classes. Yeah, one or two classes, yeah, that's fine actually. Because that's going to keep them engaged. But getting them to go through the video every time before they come to class, I think they need a lot of time to do that because they're going to have assignments. You know, that's going to be extra hours for them. You know, having another two hours of videos, uh... lecture video and then they come to class and then only they learned, and it's going to consume a lot of time and that's going to demotivate the students. So, for me it can be integrated, uh, few classes, but not all classes.

Interviewer: OK. Alright. Umm, so, just now you mentioned that the process, the effort that you need to learn how to use flipped learning would be tedious. So, do you think this is a factor that would affect your decision to use flipped learning?

Interviewee: Yes, definitely. It will affect. It influences in using it, yeah.

Interviewer: OK alright, so how do you think the opinions of your boss or superior or maybe colleagues would affect your decision to use flipped learning?

Interviewee: Yeah. If it's forced, then we have to do it.

Interviewer: Do you mean if the superior encourages you to do it then you will have the intention to use flipped learning?

Interviewee: Yes.

Interviewer: OK. What about the support provided by university? For example, if there is existence regarding resources or maybe a training provided concerning flipped learning, would this affect your decision to use flipped learning?

Interviewee: Umm. Not really, not really. The training itself would not help me because I still find it... there are disadvantages. I don't feel that because this flipped learning, one of the disadvantages is it's not going to engage the students as it's going to be one way you know. So, I've already decided that's already in my mind. Training of course it will improve my knowledge of doing it. I know how to do it. So I have sufficient knowledge about it. So training alone I I don't think so that's going to, uhm... influence me in using flipped classroom.

Interviewer: OK. In conclusion, do you intend to use flipped learning in the coming future?

Interviewee: Definitely when there is an, it's necessary. As I said, I would not prefer it to use it for the whole semester, but you know to use it one of the learning methods. Yeah, one of the learning methods to engage them, to have a different feeling or let's say, you know, because of the pandemic, we'll never know what's going to happen in the future, right? So maybe you know there there are, you know, students who are not well and you know, if I am not well and I can't come, can't make it for the class, then I think flipped learning would be one of the method. OK to continue the class.

Interviewer: OK, alright. So, besides what we have discussed, are there any other factors that you think would affect your decision whether to use or not to use flipped learning?

Interviewee: Yes, the Internet connectivity. You know, the students' Internet connectivity. You know, increased screen time... That's going to affect the students' eyes. My eyes, you know. Yeah. And it's not all homes are equally supportive for students. You know, we don't know, I can come up with flipped learning but we don't know

whether the students have enough of data to watch the video, download the video and all those things. Definitely factors... hindering me from using flipped learning.

Interviewer: Alright. So, I think that will be all for this interview session. Thank you so much.

Interviewee: OK, thank you Zhi Jun.

[End Transcript: 0:09:05]

Interviewer: Chew Zhi Jun

Interviewee: P4, ESL lecturer

Interview setting: Interview conducted through video call on MS Teams. Interview was conducted at 10:15 a.m. on Thursday (14/07/2022).

[Begin Transcript 0:00:09]

Interviewer: First of all, I would like to ask, what are your thoughts about flipped learning in general?

Interviewee: OK, good morning. I think in general, flipped learning is a very good alternative. It's a very good method in teaching. As you know, we have uh... a lot of methods and you know, it is up to the teachers or lecturers to choose uh... their preferences and which of the methods are suitable to be implemented according to the settings and according to the level of education. And in my opinion, I think flipped learning is a very, very good method to be used in all levels.

Interviewer: Alright. So, have you ever used flipped learning in your own teaching?

Interviewee: Yes, we did. We had to, especially during the COVID era, OK, during the pandemic, especially I think in the year 2020 and some parts of 2021, we really had to, you know, prepare pre-recorded videos. And then we had to conduct our classes online, and then at the same time we encouraged discussion among students. Yeah, it is a bit, you know, a mixture of both. And of course, there is uh... You know, student-centered activities being implemented during class time, although it was uh... I think most of the time during the pandemic era, we conducted classes online. But yeah, I'm not sure 100% whether it is considered as flipped learning, but there are bits and you know components of learning being implemented during that time.

Interviewer: OK, so what factor do you think would affect your decision to use flipped learning in your teaching?

Interviewee: OK, there might be numerous factors. There might be different possible factors which lead to the decision. OK, one of the decisions, OK, I mean the simplest one on top of my head is because you know, instructions by the management. They asked us to do this during the... the pandemic, OK so that the students will not fail. You know, worried if let's say there are technical problems because that time we conducted online teaching using, you know, uhm... Microsoft Teams platform and whatnot. So as a precaution as a backup, we had to prepare pre-recorded videos. And sometimes uh... audio recorded slides. OK before after the class we should, we had to post or share the videos, or the audio recorded slides to the students. OK, so that that could be one factor. But apart from that, in general, I think teachers out there or educators out there, if they want to you know, implement flipped teaching, OK, I think one of the reasons could be that they want active participation from the students. Because I think, uh, it depends also on the group of students that we received. OK, let's say they want more engagement and activities from the students' side. They want more independence. They want to give more freedom to the students. They don't want the teaching and learning session to be too rigid. I think they will opt, they will implement the teaching style, or method. Because yeah, I do... I do think that the one-way teaching and learning, you know, lesson get the one way in which the teachers will always say everything and then the students will always listen for the entire two or three hours. I think it is not the most efficient way of learning.

Interviewer: Alright. So based on your own experience, how do you feel about using flipped learning in improving your own teaching experience? Like how do you think about the usefulness of the flipped learning method?

Interviewee: OK, my honest opinion will be that it will never be a bad thing. OK? Because why? As teachers and educators, I think we have to go through the lesson. We have to go through the slides and the teaching materials on the week or on the that particular day, more than one time. OK. If let's say we only implement like, you know the traditional method of teaching, I think the only time that we go through the entire slides appropriately is during the class time. But with flipped teaching, we had to prepare the slides and then we had to record the slides and then of course if there are any technical errors or if there are any parts which are not clear and whatnot, we had to redo it again or we had to improvise or improve the recordings and whatnot. I'm pretty sure that for those who have implemented flipped teaching or who are still implementing flipped teaching, OK, they will be, you know, will be... repeating. OK, it will be, you know, repeating their lessons many, many times. They will see, they will improve, and they will see all the weaknesses, and they will always improve what they are promoting or providing to the students. So, I do think that there are a lot of advantages and yeah, that is the ultimate advantage in which we ourselves as the teachers or educators, we will have a look at our syllabus many times and of course we can always add and improvise to... for the lesson to be more effective from time to time.

Interviewer: Alright, so do you think this is a factor as well that will influence your decision to use flipped learning?

Interviewee: Uhm... it depends on the situation. If let's say I have already mastered this, let's say a particular subject or particular lesson, sometimes I would think that I do not

need to like, you know, repeat many times or record many many times or you know, prepare different kinds of slides or different types of documents for a particular lesson, a particular subject. But if let's say I'm uh, getting a new subject. Let's say that from the teachers point of view. OK, we get new subjects. We are not really the masters of the specialists of the subject given, that would be a really good thing to do. OK. I mean when we implement flipped teaching, it will help us. I mean it will speed up the process for us to master the lesson, the syllabus.

Interviewer: OK. Alright. Understood. So, how was your experience regarding the effort needed to learn how to use flipped learning?

Interviewee: OK, uh, I think, yeah, we need more effort. We need more time. Yeah, of course. It is slightly different from the past, I guess. OK. In the past we normally read, we find extra information, we find updated information so that we can, you know, elaborate the points, OK, add more interesting stories in our lessons during lecture. But with flipped learning, OK, we still have to do that, the one I've mentioned uh... seconds ago. But on top of that, we still have to do, you know, like extra slides. OK, I have to record the slides and so on. So, of course, we need extra effort and extra time to do all this.

Interviewer: OK. Since you mentioned that using flipped learning might take extra time and effort, do you think this would affect your decision to use flipped learning?

Interviewee: Yeah, I think I will go back to my answer previously, OK. It depends. If let's say we're given. Yeah. Yeah, given a subject that, let's say sometimes I'm given, you know, some odd subjects, odd programs or courses that, yeah, we are not familiar with. Yeah. Flipped teaching will help in the process... in the process of myself, you know, mastering the subject. But if let's say I already knew a lot about a particular subject, I have to think again whether to, you know, put a lot of effort

to do flipped teaching, or just continue using the usual method I implemented before. So, I would say that I am on the 50-50 side. You know, I can go either way. If I think that I want to do flipped teaching I go and do flipped teaching. If I don't do flipped teaching, I think I would be fine in general.

Interviewer: Alright. OK. So, in the beginning of the interview, you also mentioned that one of the factors that would affect your decision to use flipped learning is the instructions by the management. OK. Do you think that the opinions of your superior or colleagues would affect your decision to use flipped learning?

Interviewee: OK, if that is the case, OK, I said before, I don't mind if let's say, OK, all tertiary education educators must use flipped learning at any time. If that's the situation, I will yeah, I will be happy to do it. No problem, no issue whatsoever. And you know, because of the pandemic and what not, even before pandemic, I always thought about this option. OK? Because I do think that it is quite important, you know, for students to, you know, study on their own or read slides or listen to slides even before they attend classes. OK. So, either way, I think it is a really good thing to do.

Interviewer: OK. The next thing, we will be talking about the existence of resources or support given by the university. So, do you think support given by the university, for example, for example training about flipped learning, would affect your decision to use flipped learning?

Interviewee: I do think so. I think that's an important thing. It is an important thing to do. I mean, stakeholders or anybody involved. I think they do have to help and also you know, provide trainings and assistance whenever anybody wants to implement flipped learning. Because I think there's more aspects to fit in compared to the traditional method of teaching. Of course, yeah, because we

involve, you know, videos involve all the technical stuffs like IT stuff and then also, you know, there are so many trainings since 2020 in which the scholars, the professors out there, they put emphasis on e-learning. They put emphasis on, you know, utilizing the Internet and utilizing the e-learning to the max, to the maximum because... I think yeah, there are so many advantages when we, you know, diversify our method of teaching, traditional method of teaching is still very important. OK, without a doubt, it is still very important to be in class face to face, see students face to face, request answers from students face to face. But apart from that, we do have, you know, like technology and then we do have like activities that we can implement during class time. I do think that by diversifying everything, OK, you can include any every possible method and techniques that we can in order to make the lesson efficient, more effective.

Interviewer: OK. Besides what we have discussed so far, are there any other factors that would affect your decision either to use or not to use flipped learning in your teaching?

Interviewee: OK. And the most basic reason, you know like if we use only, you know one way method like the teacher centered method, I think it will be very boring. Like, you know, the engagement would be very low. People will be sleepy, not only the students, even the teacher will be also bored with the situation. Like we always do during perhaps primary school, secondary school and even before in uh... tertiary level. Umm, the one-way method you know like sometimes the students will not even know what the discussion is about. They don't even know the terms and the components that were taught during that time. So, with a method like flipped teaching, I guess everybody has to know something. Everybody has to contribute something to the lesson. OK. So, the most basic factor for this is to avoid all the, you know, boredom and so on.

Interviewer: OK, alright. So, I think that will be all for the interview today. Thank you so much
for your time today.

Interviewee: OK, no problem.

[End Transcript: 0:13:36]

Interviewer: Chew Zhi Jun

Interviewee: P5, ESL lecturer

Interview setting: Interview conducted through video call on MS Teams. Interview was conducted at 3:17 p.m. on Friday (22/07/2022).

[Begin Transcript 0:00:07]

Interviewer: First of all, I'd like to know what are your thoughts about flipped learning in general?

Interviewee: Flipped learning in general. In my opinion, that suits especially older students and it makes learning and teaching convenient if you ask me.

Interviewer: So in your opinion, are there any other advantages or maybe disadvantages?

Interviewee: Disadvantages would only apply to those who do not have the means to access the flipped learning, but advantages would be the personalized learning style that the student can adopt to, and also for the teachers. They would have a lot of flexibility that they can accord to the students when it comes to flipped learning.

Interviewer: OK. Have you ever used flipped learning in your teaching?

Interviewee: Uh. After MCO? Yes, very frequently.

Interviewer: OK. So, would you mind to describe the way how you used flipped learning?

Interviewee: I started with completely online teaching and learning, and later when physical sessions started, I gave the recording of my lectures to the students, but then I discussed the content of the lecture in my practical. And also, I gave them a lot of interactive games, not to say games, activities because these are tertiary students, so games are not really applicable to the term that... to the content that I give them. But the interactive activities, yes. And then these activities can be carried

out whenever the students are free because every activity comes with the due date which is about 48 hours minimum.

Interviewer: OK. So, what factors do you think would affect your decision to use flipped learning in your teaching?

Interviewee: Affect my decision? In what way?

Interviewer: Let's say for example, like based on your experience, how do you feel about using flipped learning in improving your teaching experience?

Interviewee: Uh, OK, when I do flipped learning, I can do more. I realize that because I'm not restricted to a classroom setting and a schedule that I have to follow. Normally, we when the schedule is disseminated to the staff, they have to follow it rigidly because after our class there will be another class by another lecturer and we have to leave the facility, you see. But with flipped learning, learning is not constricted to a physical structure. Learning is in virtual platform, and we can meet anytime we want. We can discuss anytime we want. And uh... because most of the content is discussed in virtual platform, when it comes to physical practicals or tutorials, we can effectively interact as well. Certain things we cannot do it in virtual platforms, right? So, face to face interaction will be more dynamic in that sense. We don't spend more time, uh... not to say waste the time, but unnecessarily spending time explaining things which we can do when we flip the class. In the class face to face, interaction would be kept in a very focused thread. What students really need to know when they want to see their lecturer explaining face to face? They only focus on that. The other minor details, they can always push it to the virtual platform because of the flipped learning.

Interviewer: OK. So, do you think this would be a factor that affect whether or not you want to use flipped learning?

Interviewee: Yeah, definitely.

Interviewer: OK. So what about your experience regarding the effort you need to learn how to use flipped learning.

Interviewee: The effort was quite challenging because I'm not from the digital native generation. So, technologies cast me quite a lot. However, as I said when pandemic became virulent, everybody had to adapt to it. So even the older generation like me have to go and approach technology. Learning at the beginning was challenging, but later the necessity made it a requirement. And now I actually enjoy using it.

Interviewer: OK. So, do you think this would be a factor as well that affect your decision to use flipped learning?

Interviewee: Yeah, definitely.

Interviewer: OK, alright. So, the next question, how do you think the opinion of your boss or colleagues would affect your decision to use flipped learning?

Interviewee: Umm, because the decision comes from the higher authority. Uh, I think the impact factor would be highly positive. They encourage us to do so.

Interviewer: OK, so that means that in your opinion, you would think that their opinion would actually affect your decision?

Interviewee: Uh. My boss? Yes, if the boss says we cannot flip, then of course I have to follow. But my colleagues, not really. Because we all have our own thing to do. Whenever it comes to our work. So, I can ask for their suggestion if I don't want to, I'm free to reject and follow my own path.

Interviewer: So, how do you think the existence of resources or support provided by the university would affect your decision to use flipped learning? For example, the

support here I mean would be training provided by the university regarding flipped learning.

Interviewee: Uh, yeah, that would definitely affect me, and fortunately my workplace provides quite a lot of resources for us, aids and also tools to carry out with the flipped learning. Because as I said, my higher authority encourages flipped learning. So, that would be a very big factor for me to decide whether I want to implement this or not in my work.

Interviewer: OK, so, besides what we have discussed just now, so is there any other factor that you think would affect your decision? To use or not to use.

Interviewee: Yeah. Uh... students' participation and students welcome... whether they welcome flipped learning or not.

Interviewer: Could you say a little bit more about this?

Interviewee: Well, if let's say I introduce flipped learning where I give them the content of lecture online and then later I ask them to come and discuss in the classroom, the ones who are OK with that kind of trend, they would be very welcoming. But those who prefer to be there physically to listen to the lectures and also the tutorials, mostly the passive students, I mean because they just want to get the input and also the answers to the questions. If I have students like that, majority in the class, most probably when I flip it, it wouldn't be a very positive uh... It won't receive a positive welcome from the students. Since the major stakeholders in my work would be students, if they don't welcome it, that would be a very big deciding factor for me. Whether I want to flip or not.

Interviewer: OK. Do you intend to use flipped learning in the coming future?

Interviewee: Yes, definitely.

Interviewer: Yeah. So, at the current moment of what is the main driving factor that would encourage you to flip your classroom?

Interviewee: The driving factor? Currently?

Interviewer: Yes.

Interviewee: Uh, the pandemic because of the increasing. I'm trying to minimize the contact the students will have with me and also with each other. And of course, that's another factor. Students come up positive results, COVID positive every week. So, for them, flipped learning helped them a lot.

Interviewer: I see. Alright. So, I think that would be all for the interview today. Thank you so much for your time.

Interviewee: No problem.

[End Transcript: 0:08:30]