# IMPLEMENTATION OF FLIPPED ESL CLASSROOM AT TWO PRIVATE TERTIARY EDUCATION INSTITUTIONS

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# DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION (ENGLISH LANGUAGE EDUCATION)

FACULTY OF EDUCATION
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# UNIVERSITY OF MALAYA ORIGINAL LITERARY WORK DECLARATION

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#### **ABSTRACT**

Flipped classroom model is a pedagogical strategy which utilises technology to move the lecture outside of the classroom, thus giving more time in the classroom for students to work cooperatively with their peers. It is even mentioned as one of the important developments in educational technology for higher education. However, only a few studies done in showing that the implementation of this model achieved favorable outcome in Malaysian tertiary ESL classrooms. It is because the elements of FC are misunderstood by the lecturers and the students. Besides, previous studies showed that the concept and design of this model was under-utilised in the tertiary education ESL classroom. Thus, this study aims to explore the implementation of this model in ESL classrooms at two private tertiary education institutions as well as to investigate the lecturers' and students' perceptions in conducting the lessons. In order to achieve this aim, this study has conducted a qualitative study which includes classroom observations and semi-structured interviews with the lecturers and the students. The findings showed that there are six strategies that have been implemented which are preparation of online learning content, the use of interactive platforms, a check for students' understanding of the content, reinforcements for students to prepare prior class, iteration of online learning content and arrangement of engaging in-class activities. The lecturers perceived this model enhanced their teaching and students' learning. In addition, the students also perceived that they prefer this model than the traditional classroom. Nonetheless, they still faced challenges while conducting flipped classroom model. As a result, ESL instructors who are interested in implementing this model should fully understand its elements and consider the challenges so that this model can be implemented successfully and reap its benefits.

# PELAKSANAAN KELAS ESL BERBALIK DI DUA INSTITUSI PENGAJIAN TINGGI SWASTA

#### **ABSTRAK**

Model kelas berbalik adalah satu strategi pedagogi yang menggunakan teknologi untuk mengalihkan syarahan ke luar bilik darjah, seterusnya memberi banyak masa di dalam bilik darjah untuk aktiviti-aktiviti kolaboratif dalam kalangan pelajar. Ianya juga disebut sebagai salah satu perkembangan yang penting dalam teknologi pendidikan di peringkat pengajian tinggi. Walau bagaimanapun, hanya beberapa kajian-kajian terdahulu dijalankan dalam menunjukkan pelaksanaan model ini yang telah mencapai hasil yang menguntungkan dalam bilik darjah ESL (Bahasa Inggeris sebagai Bahasa kedua) di peringkat pengajian tinggi di Malaysia kerana unsur-unsur tersebut disalaherti oleh para pensyarah dan para pelajar. Di samping itu, kajian sebelumnya menunjukkan bahawa konsep dan reka bentuk model ini kurang digunakan di dalam bilik darjah ESL di peringkat pengajian tinggi di Malaysia. Justeru, kajian ini bertujuan untuk meneroka pelaksanaan model tersebut dalam kelas ESL di dua institusi pengajian tinggi swasta, dan juga menganalisis persepsi para pensyarah dan pelajar dalam menjalankan pengajaran dan pembelajaran. Untuk mencapai tujuan tersebut, kajian ini dijalankan secara kualitatif, termasuk pemerhatian di dalam kelas dan temuduga separuh berstruktur yang melibatkan para pensyarah dan para pelajar. Hasil kajian menunjukkan terdapat enam strategi yang telah dilaksanakan iaitu persediaan kandungan pembelajaran secara atas talian, penggunaan platfom yang interaktif, semakan pemahaman pelajar terhadap kandungan, pengukuhan persediaan para pelajar sebelum waktu kuliah, pengulangan kandungan pembelajaran secara atas talian dan susunan aktiviti dalam waktu kuliah yang menarik. Para pensyarah juga berpandangan bahawa model kelas berbalik ini mampu meningkatkan prestasi pengajaran mereka dan pembelajaran para pelajar. Tambahan pula, model kelas berbalik ini lebih disukai oleh para pelajar berbanding model kelas tradisional. Walau bagaimanapun, mereka masih menghadapi cabaran dalam menjalankan model kelas berbalik ini.Oleh yang demikian, para pengajar yang berminat untuk mengaplikasikan model kelas berbalik haruslah memahami sepenuhnya unsur-unsur model ini dan mempertimbangkan segala kekangan dan cabaran supaya model ini dapat dilaksanakan dengan jayanya seterusnya membuahkan hasil yang diingini.

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#### LIST OF ABBREVIATIONS

AM : AudioLingual Method

CBI : Content-Based Instruction

CLT : Communicative Language Teaching

EFL : English as Foreign Language

FC : Flipped Classroom

PPP : Presentation, Practice, Production

TBLT : Task-Based Language Teaching

TDM : The Direct Method

TGTM : The Grammar Translation Method

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#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 Introduction

English language is commonly used among Malaysians as it is the second language after the official language, Bahasa Malaysia (Gill, 2002). Thus, being proficient in the language is undeniably important. English was promoted for its practical value in tertiary education as well as for employment (Siti Sukainah Che Mat & Melor Md. Yunus, 2014). According to Siti Martini Mustapha and Ros Aizan Yahya (2013), it is a ticket for employment and English is the most powerful factor for a person to get hired. Besides, English is also used to access knowledge of the Science and Technology of the west (Hardman & Norhaslynda A-Rahman, 2014).

Despite the importance and the need to be proficient in English has been emphasized tremendously by the government, yet Malaysian students' English language proficiency is still inadequate. According to Hazita Azman (2016), the exposure of the language in the early years of the students' life, does not secure competent acquisition of English language.

Ministry of Education (MoE, henceforth) has implemented numerous efforts to improve this situation. Nonetheless, teaching language is a complex process in which a teacher needs to deeply comprehend the aspects of language teaching and learning (Siti Martini Mustapha & Ros Aizan Yahya, 2013). Richards (2008) also mentioned that, teaching is a complicated process that focuses in the ability of the brain to think and is influenced by the classroom' context, the teacher's instructional goal,

learners' motivation and response towards the lesson as well as how the teacher manages the initial moments during the lesson.

Thus, it is not a surprise that the teaching of English language in Malaysia has always been scrutinized (Elisha Nurusus et al., 2015). According to Siti Martini Mustapha and Ros Aizan Yahya, (2013), in learning a second language, the existence of teachers is very vital. The teachers are responsible to make sure the students acquire language in the class. McLaren (2015) also added that for teachers to be effective, they need to spend time to look for better teaching techniques that will help students succeed in school and life. He also stated, teachers have a lot of instructional strategies that can be implemented nowadays.

Despite that, over the years, common approach for delivering instructional messages have been verbal which includes lectures and books. According to Brunsell and Horejsi (2013), this traditional approach has been found ineffective, inefficient and irrelevant to contemporary students. Therefore, the need to implement alternative teaching pedagogy is necessary.

In addition to that, according to Ling and Magdaline (2015), one of the effective delivery systems for teaching and learning is by using Information Communication Technology (ICT henceforth). They stated that, due to the advancement of ICT, the traditional classroom has changed towards the use of Internet and mobile computers. Fisher (2009) also pointed that, by using this technology, teacher can maximize the limited time with the students in the classroom. For example, teacher's lecture can be substituted with a video recording of the lecture or the students can even do research on the topic that they are assigned to.

To address many of the issues of the traditional classroom approach, advocates such as Bergman and Sams (2012) and Farah (2014) have proposed Flipped Classroom (FC henceforth) as a pedagogical strategy that combine both ICT and making students responsible for their own learning as an effective teaching pedagogy.

FC is a teaching model in which what usually happens during class time for example lecture and demonstrations, happens outside of the class (Fraga & Harmon, 2015). In other words, FC engages students in knowledge acquisition of course material prior class session (McCallum et al., 2015). Lectures are substituted by videos, reading materials, online chats and other resources (Hall & DuFrene, 2016). The students will first expose to the new topic as an individual outside of the classroom because it emphasizes on the need for students to prepare before class. Moreover, students will have the freedom to pause, reflect, rewind and listen as much as they want (Abeysekera & Dawson, 2015). This way students can build their understanding and learning by viewing and reading the learning material provided as well as researching online for additional information.

Subsequently, in the class, the students will lead their own learning (Ginnis, 2002) by internalizing the materials with the help of the peers and instructor working on a highly cognitive task (Farah, 2014). The class time will be used to focus on the application, analysis, synthesis, evaluation and creation - based activities such as debate, role play and group-based or project- based discussions and so on (Kvashnina & Martynko, 2016).

As for the implementation of FC in teaching English, there are a few researchers that have examined the affordance of this model with their studies. Webb et al. (2014) have examined the effects of flipped classroom with 35 participants in a university in Macau. The students enrolled in English language course which is a requirement for General Education. From the data collected, which were questionnaires to the students and teachers' reflections, the researchers stated that initially students did not like the approach but as they went along gradually, they became attuned to it and even wanted more online instruction at the end of the semester. As for the teachers' perspectives, three out of four of them supported this approach to be implemented in their classes.

There are many studies done in searching for the effectiveness of FC among them are researches done in Polytechnic (Siti Zuraidah Md Osman et al., 2014; Rozinah Jamaludin et al., 2016), private universities (Neo, 2004; Danker, 2015) and public universities (Zainuddin & Attaran, 2015; Ajayi et al., 2017). Therefore, this study aims to investigate the FC strategies used by the lecturers in ESL classrooms in order to investigate the FC strategies that they used.

#### 1.2 Problem statement

This study aims to explore the strategies used by the tertiary education lecturers in implementing FC in their ESL lessons. Besides, it also wants to investigate the lecturers' and the students' perceptions and the challenges they faced in implementing this model. FC has been implemented in not only tertiary education but also in all level of education. (Alsagoff et al., 2014). It is a pedagogical strategy that utilises technology to move the lecture outside of the classroom, thus giving more time in the classroom for students to work cooperatively with their peers.

However, Jowaty Juhary and Ahmad Fahimi Amir (2018) stated that incorporating technology in teaching and learning needs more demands than the traditional classroom. They reported that lecturers have difficulties adjusting suitable classroom activities with the online learning content the lecturers shared on the online platform. Moreover, lecturers also need to have the strategies to align the classroom activities with the online learning content to cater to different students' needs. On top of that, lecturers, especially the new ones, will not incorporate technology in their lesson as they lack teaching experiences (Jowaty Juhary & Ahmad Fahimi Amir, 2018). Thus, it will lead to resistance in using FC as well as other technology tools in their classrooms. As a result, FC is under-utilised by lecturers in tertiary education.

According to Abeysekera and Dawson (2015), FC allows students to learn at their own pace. This is due to the transmission of virtual lectures prior class. For the video lecture, students can pause, rewind, fast forward and even skip any parts of the video. Students will view the lecture on the topic, and then they can rewind the lecture again if they have difficulties understanding the topic. Nonetheless, Li (2018) stated in the case study that she did with undergraduate students in Northwest China, the prerequisite elements for FC are difficult to conduct and the objectives of the elements are difficult to be achieved. The pre-requisites elements are instructor ability to make microlectures and knowledge of Information Technology (IT henceforth), students' knowledge of IT and a common communication platform between teachers and students.

It is because some lecturers do not have proper skills in using technology for meaningful engagement. Due to this, FC can be implemented poorly. Even though there are no fixed guidelines to implement FC (Harris & Jones, 2014), the lecturers

need to have the skill to present content virtually and that varies from one lecturer to another. On top of that, lecturers also need to be aware of the presenting styles because lecturers must cater to students' various needs. As a result, it is crucial for lecturers to understand the concept and design of a successful FC in tertiary education as this model has the capacity to enhance the 21<sup>st</sup> century learning. Moreover, by understanding and implementing the concept and design of FC can make the lesson runs smoothly.

FC researches and practices in public tertiary education ESL classroom have been conducted by a few lecturers such as Siti Fatimah Abd Rahman et al. (2019) and Farina Tazijan et al. (2016), however the evidence is not adequate and strong to encourage and guide the implementation of this model in tertiary education ESL classrooms whether in public or private universities. As a result, the model's elements which are important for a successful FC in tertiary education ESL classroom would be misunderstood and would not gain the benefits that they offer. Based on this, this study tries to fill the gap in the FC researches and practices in tertiary education ESL classrooms.

FC is widely used in tertiary education around the world (Kvashnina & Martynko, 2016). In Malaysia studies of FC lesson in tertiary education has also been conducted such as by Zainuddin and Attaran (2015) and Harris and Jones (2014) of University of Malaya, Mohamed Amin Embi and Ebrahim Panah (2014) and Raihanah M. Mydin (2014) of Universiti Kebangsaan Malaysia, Lee et al. (2014) of Universiti Malaysia Sabah, Sazilah Salam et al. (2014) of Universiti Teknikal Malaysia, Charanjit Kaur Swaran Singh et al. (2018) with Institut Kemahiran Belia Negara students.

There were also a few studies done in private universities in Malaysia such as a study by Danker (2015) at Sunway University, Islam et al. (2018) at SEGi University and Chem et al. (2018) also conducted their studies in an Australian university campus in Malaysia. However, Mohamed Amin Embi (2011) pointed that a lot of researches and practices of online learning should be done. This is crucial in order to support the implementation of technology in tertiary education classrooms as if it is not implemented genuinely the teaching will fail miserably and the students will not learn and notice the need to shift to online learning.

Therefore, this study is interested in exploring the strategies used by ESL lecturers in private tertiary institutions in implementing FC by conducting a qualitative study. In this study, the researcher employed classroom observation, document analysis and interviewed the lecturers and students after their lesson to collect the data.

### 1.3 Purpose of the study

The purpose of this study is to investigate the strategies used by private tertiary education institutions lecturers in using FC, lecturers' and students' perception of FC and, how the teacher and students overcome challenges in using FC in ESL classrooms in Malaysia.

#### 1.4 Research objectives

The objectives of this study are:

 to explore the Flipped Classroom Model strategies used by ESL lecturers in private tertiary education institutions in Malaysia;

- to investigate the lecturers' and the students' perception of the implementation of Flipped Classroom Model in ESL classrooms at two tertiary education institutions; and,
- to investigate the challenges that the ESL lecturers and students face in Flipped Classroom Model lessons.

#### 1.5 Research questions

Three research questions are listed to answer the questions.

- 1. What are the Flipped Classroom Model strategies used by private tertiary education institution lecturers?
- 2. What are the lecturers' and the students' perception of the Flipped Classroom Model lessons?
- 3. What are the challenges faced by the lecturers and students in Flipped Classroom Model lessons?

#### 1.6 Theoretical background of the study

Flipped classroom has two essential elements. The first element is the engaging students in knowledge acquisition of course material prior to class session (McCallum et al., 2015). The second element is the internalizing of the material with the help of their peers and instructor while working on highly cognitive tasks (Farah, 2014). Based on these two elements of FC, the theoretical perspective of this study is derived from Cognitive Load Theory by John Sweller (1988). The connection between language teaching strategies and FC can be explained through this theory. It is used in this study to support the investigation of strategies used by university lecturers in FC lessons, hence guided the mapping of the conceptual framework of this study.

Both FC elements are underlined by Cognitive Load Theory that explains how learners acquire and preserve latest information (Seery, 2010). According to this theory, our working memory can only process some information in one-on-one time (Miller, 1956). Therefore, study of complex cognitive skill will always be hindered by restricted information processing capacity (Noor Hisham Jalani & Lai, 2015). Due to that, it is recommended to design strategies that will optimize the use of cognitive resources and avoid overloading working memory (DeJong, 2010). Cognitive Load Theory asserts that when learning, we experience three different types of cognitive load namely intrinsic, extraneous and germane.

The intrinsic load is caused by the complex nature or irreducible difficulty of learning content. It is the unchangeable core of a problem or concept. However, the extraneous and germane load are the additional load. Extraneous load can make a task more difficult and it is ineffective in contributing to learning. For example, extraneous load can be imposed by the ineffective teaching instructions that will mislead or even distract students. This can be reduced by the use of diagram and illustration instead of just written explanation of a certain concept. On the contrary, germane load effectively facilitate in learning. It is a construction of schema in our memory that assists learning new topic. For example, the existing knowledge or information in a person's memory can help in expecting and understanding the task in the future. In other words, the nature or the intrinsic load of an assignment, task or project is unchangeable. Nonetheless, the germane and extraneous load can be accustomed to benefit students' learning. Therefore, teachers need a teaching pedagogy that can reduce the amount of extraneous load and promote germane load to achieve effective learning. Figure 1.1 shows the differences in cognitive loads. These understanding of the cognitive loads

is relevant in guiding the pedagogical exploration of FC and how this model is understood to support learning.

In FC, students are provided with the basic principles and concepts of the knowledge by the teacher through pre-lecture materials such as videos or notes. This allows students to manipulate their pace to learn a certain content individually. Clark et al. (2005) stated that learning pacing facilitate in managing cognitive load. Students are able to pause, rewind, fast forward or skip any parts of the lecture video as an effort to better manage the load in their working memory (Abeysekera & Dawson, 2015). Furthermore, pre-lecture videos help in reducing extraneous loads by introducing and providing students with visualization of the content, hence strengthen the development of schema (Noor Hisham Jalani & Lai,2015). As a result, students can get familiar with the content (Seery, 2010) and allow the working memory to concentrate and integrate more complex content during the class time. Due to that, students can understand better because their cognitive resources are optimized.

After that, students are engaged in student-centred in-class activities which usually focuses on higher cognitive activities. The learning experience that the students gain from the in-class activities will strengthen and broaden the newly acquired knowledge (Merrill,2015). The strengthening and broadening of students' knowledge are acquired through automation. It is when students have encountered and practiced the content several times. The first time, they encountered it before lesson and the next one was during the activities in the classroom. As a result, students will be more familiar and skillful the next time they come across that content as the schema of that content is stored in long-term memory.

On top of that, the opportunity to do the activities in the classroom with their peers and help of their teacher will also alleviate the use of working-memory capacity (Noor Hisham Jalani & Lai, 2015). It is because when students face the higher cognitive tasks, students need to establish a schema for transfer and storage of information. Complex tasks such as problem-solving should be solved in groups rather than individual due to the working-memory limited capacity (Noor Hisham Jalani & Lai,2015). By solving the problem in groups, the cognitive load imposed can be shared and distributed among the group members. As a result, it will alleviate every students' working-memory capacity, thus the memory can be used to solve complex problems and build cognitive schema. This schema is stored in the memory and students can avoid processing a lot of information.

Besides, Tetreault (2013) also asserted that from the collaborative learning and peer instructions, the new knowledge and prior knowledge will be comprehended better. She also added, it is because students will have difficulties in performing higher level thinking activities alone. Due to that, the in-class activities must be designed to achieve specific academic goals, facilitate students transfer background knowledge to a new situation through collaborative, problem-solving environment (Merrill,2015). Furthermore, engaging students with higher cognitive activities in the class can enhance learning experience. It can be gained when the teacher will also have the time to be present in class to assist and guide students through any difficulties to complete the activities.

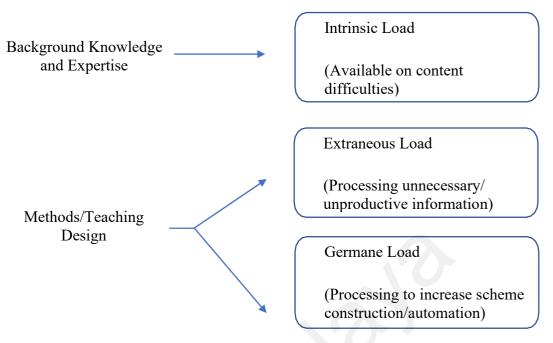


Figure 1.1 Graphical differences in cognitive loads (Noor Hisham Jalani& Lai, 2015)

#### 1.7 Conceptual framework

In addressing the research questions of this study, as discussed earlier, Cognitive Load Theory will be used in forming a conceptual framework to guide this study. Figure 1.2 shows the link of selected aspects from Cognitive Load Theory in the framing of conceptual framework. The notion of Cognitive Load Theory which recommended teaching strategies to optimize working memories by decreasing extraneous load and increasing germane load will help in steering this study. This concept will be used by the researcher to answer the research questions.

Besides, the researcher will also use the framework as a guide in planning the observation checklist at the same time facilitating the researcher with the classroom observations. After the strategies have been identified, the researcher then proceeds to look for perceptions of FC from lecturers and students. According to Abeysekera and Dawson (2015), due to the self-paced instruction of the subject content before class

and the interactive multimedia video, the students will be able to comprehend the content before in-class activities.

This is to expose the students to the topic. During this element, the students are required to individually study and understand the information prior class. The self-pacing of the pre-lecture will decrease the extraneous load because students can utilise the working memory capacity to study and understand the new topic. As a result, they will understand the topic better before class. Furthermore, the acquisition of content knowledge before class also frees up the class time which in turn allow the teacher to be present in the class (Threlkeld, 2017).

Next, during class, students will be given higher cognitive activities or tasks to be solved or performed. Students should perform the activities or tasks in a discussion and work collaboratively with their classmates. In order to complete their activities or tasks, students will actively look for ways or solutions with their peers. At the same time, students have the teacher to guide and facilitate them to transfer knowledge to new situations in a collaborative, problem solving environment (Merrill, 2015). Tetreault (2013) also claimed that the collaborative learning and peer instruction in the class will intensify the prior knowledge that they acquire before class.

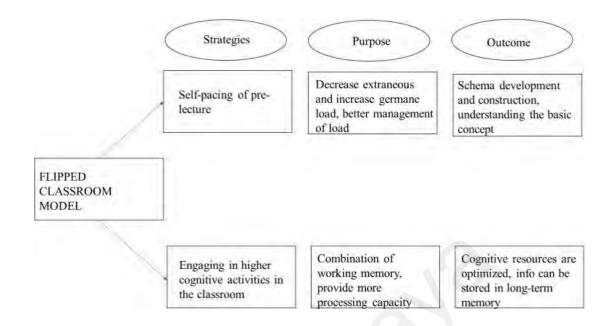


Figure 1.2 Conceptual Framework

#### 1.8 Significance of the study

This study is significant because it will provide ESL educators with teaching strategies that provides students with meaningful, authentic and purposeful learning environment at the same time provide opportunity for student to experiment and practice the target language through discussion. Besides that, this study will also provide insights to educators who wish to mentor and facilitate students face to face in their ESL classroom.

This present study also hopes to report the affordance in using this model in ESL classes so that it can be implemented throughout Malaysian tertiary education. Subsequently, this study will also provide teachers, lecturers and those who wish to use this method with strategy used and the challenges faced when conducting this method as a guide to effectively use it. As a result, Malaysia will be able compete to become a competitor in the global workforce, academia, and economy but first

Malaysian students need to be adequately proficient in the English language through meaningful English lessons in schools.

#### 1.9 Limitations of the study

There are a few limitations of this study. The first is the small sample of two participants from two private tertiary institutions only. The number of students involved in this study was also small. Purposeful sampling was used for this study. Therefore, the findings cannot be generalized and also duplicated to other settings.

The second limitation is the duration of time for this study. The data was collected took around 3 months and thus, the data may not be the overall performance of FC from the instructor and the students. During the 3 months' time, the researcher also couldn't observe all the lessons because the participants only permitted several classes.

Finally, since the analysis of this study is done qualitatively, the researcher's personal values and experiences may lead to the researcher's bias in the way the researcher interpreted, analyzed, and presented the data collected. However, the researcher has tried to eliminate any researcher's bias as much as possible.

#### 1.10 Definition of terminologies

Flipped classroom model. Flipped classroom model is a teaching model in which what usually happens during class time for example lecture and demonstrations, happens outside of the class (Fraga & Harmon, 2015). Lectures are substituted by videos, reading materials, online chats and other resources (Hall & DuFrene, 2016). In this study, the lecturers uploaded the learning content via the institution's LMS, WhatsApp and Telegram app. The lecturers also utilised WhatsApp and Telegram as

platform to communicate with their students. Moreover, these platforms were used to check whether students performed their out—of-class learning. Later, in the classroom, lecturers instructed students to perform tasks or activities which require higher order thinking skills. In order to complete the tasks or activities, the students actively discussed with their peers to solve or perform the tasks or activities. The class time will be used to focus on the application, analysis, synthesis, evaluation and creation - based activities such as debate, role play and group-based or project-based discussions and so on (Kvashnina & Martynko, 2016).

Cognitive Load Theory. Cognitive Load Theory is a theory of the human cognitive architecture and the design of instructional systems. The human cognitive architecture components consist of working memory (short-term memory), long-term memory, schema construction and schema automation. This theory suggests that learning occur best in a situation that is parallel to individual cognitive architecture. (Sweller, 1988). According to DeJong (2010), cognitive capacity in working memory is restricted, so that if a learning task exceeded the capacity, learning will be impeded. Therefore, it is recommended to design teaching pedagogies that optimize the use of working memory capacity and avoid cognitive overload.

**Learning**. According to Sweller (2005), "learning is defined as an alteration in long-term memory." (p.20). The alteration of long-term memory involves schema construction and automation (Sweller et.al, 1998). Thus, in order for individual to learn, the instruction should emphasize in adjusting the long-term memory.

**Schema.** Schema is a cognitive structure that consists of the combination of complex contents in the long-term memory. With this structure, an individual can accept, think

and solve the problem. (Noor Hisham Jalani & Lai, 2015). According to Sweller (1988), it is a structure that constructs an individual's knowledge base.

**Automation.** Automation is when the information that has been learned (constructed schema) and practiced maturing over time can become automatic. (Sweller,1988). As Sweller et al. (1998) described, "with automation, familiar tasks are performed accurately and fluidly, whereas unfamiliar tasks—that partially require the automated processes—can be learned with maximum efficiency because maximum working memory capacity is available" (p. 258).

**Working memory.** It is also known as short term memory where it is a memory system that holds small amount of information for a brief period. The term working memory is to highlight that this part of memory is in charge for processing the information (DeJong,2010).

**Long-term memory.** Long-term memory is the part of the memory where a substantial amount of information is stored (DeJong,2010).

Intrinsic cognitive load. Intrinsic cognitive load is a cognitive load that relates to the nature or difficulty of the learning content (Noor Hisham Jalani & Lai, 2015). The intrinsic load is caused by the complex nature or irreducible difficulty of learning content. It is the unchangeable core of a problem or concept.

**Extraneous cognitive load.** Extraneous cognitive load is a cognitive load that relates to the ineffective instructional material and the pointless to learning (DeJong,2010). It is the outcome of the ineffective instructional strategies that unintentionally engage students with confusion or make a task harder than it should.

Germane cognitive load. Germane cognitive load is a cognitive load that is effective and facilitating in schema construction or automation. (Abeysekera & Dawson, 2015). It is the outcome of useful cognitive processes such as abstraction and explanations which is assisted by the instructional presentation (Gerjets & Scheiter, 2003).

ESL classroom. Medium of instruction in Malaysian schools is Bahasa Malaysia (BM) and English is taught as a subject in schools. English as a second language means English is second importance after BM. Majority of learners come from backgrounds where they have never spoken of English. Their mother tongue ranges from BM or Chinese or Indian languages. There is a portion of urban population that does use varieties of Malaysian English at home or mixes two or three languages when communicating with their family members (Gaudart, 1999). English is taught from primary to secondary and also in secondary level of education.

#### 1.11 Conclusion

As the need to provide learning environments in a language classroom which encourages critical thinking, fosters innovative culture and acknowledges diversity in global spaces is urgently needed (Normazidah Che Musa et al., 2012), the purpose of this study is drawn to investigate FC strategies. This present study hopes to report the affordance in using this model in ESL classes so that it can be implemented throughout Malaysian tertiary education level.

#### **CHAPTER 2**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter review the literature relevant to the study. It first briefly overviews the English language teaching approaches and methods. Subsequently, it will also review on teaching and learning ESL in Malaysian education system. It then allocates more substantial space for reviewing Flipped Classroom model.

#### 2.2 Overview of English language teaching approaches and methods

By the late eighteenth century and early nineteenth century, The Grammar Translation Method (TGTM henceforth) was introduced as the language teaching approach (Selamat, 2014). This approach was suitable for language learners who were interested in comprehending and appreciating foreign literature or academic texts. The principal characteristic of this method is reading and writing. They are the major focus in which the mastery of vocabulary is taught through bilingual word lists, dictionary study and memorization. Besides, mastery of grammar is taught by presentation and study of grammar rules, which subsequently practiced through translation exercise into their native language (Griffiths & Parr, 2001; Richards & Rodgers, 2001).

Due to the disappointment that TGTM could not produce learners who can communicate in the target language, The Direct Method (TDM henceforth) was created at the end of nineteenth century (Selamat, 2014). In this approach the classroom instruction is conducted in the target language. The students are prohibited to use their native language in the classroom. Thus, the concrete vocabulary is taught by using demonstrations, objects and pictures, while the abstract vocabulary is taught

by association of ideas. However, the drawback of this method is that the teacher is required to be native speakers or those who had native like fluency in the target language (Richards & Rodgers, 2001).

Between 1940S and 1960s, the Audiolingual Method (AM henceforth) was a popular method in the United States (Celce- Murcia, 2001). AM is a linguistic structure-based approach to language teaching (Richards & Rodgers, 2001). Its objective is to produce language learners who are fluent to communicate in the target language. This method is based on B.F Skinner Behaviorist theories, that believed language can be learnt through repeated practice and that language learning is viewed as habit formation of mechanical process. The first language skills taught is listening followed by speaking, reading and writing (Selamat, 2014). Same as TDM, this method forbids learners to use native language in the classroom. However, according to Harmer (2001), the practice of patterned drilling resulted some drawbacks such as language is decontextualized and has little communicative function. Nonetheless, this habit- forming drills is commonly use among teachers and students.

On the other hand, while the United States were using the AM, the British used PPP which is a variation of Audiolingualism, which stands for Presentation, Practice and Production. The procedure of this language teaching starts off with teacher introduces a contextualized situation to the language to be taught. After the language is presented, students practice by using choral repetition, individual repetition and cueresponse drills. During the production stage, students are asked to use the new language in sentences of their own (Harmer, 2001). Besides PPP, there was also Situational Language Teaching. This teaching strategy emphasizes the teaching of grammar, meaning of the words and structures is not by using explanation in the target

language nor the students' native language. Instead, it is done by the way the form is used in a situation. Students then need to deduce the meaning of the particular vocabulary or structure from the situation presented. Students were also expected to apply the language learnt in the classroom to outside of the classroom (Richards & Rodgers, 2001).

A major shift in language teaching happened in the period of 1970s to 1980s, in which the number of interests in the communicative approach to language teaching was increasing. The advent of Communicative Language Teaching (CLT henceforth), marks the starting of the shift. Richards and Rodgers (2001) have stated that, CLT is best considered as an approach than a method. They also added that, CLT is a diverse set of principles that exhibit a communicative view of various classroom procedures. Its objective is to produce competent language users who can utilise the language fluently and effectively (Selamat, 2014). The main principle of CLT is to train students to use the language correctly in various context and functions, hence the focus on the language functions for communication rather than the forms and structures (Harmer, 2001; Siti Martini Mustapha & Ros Aizan Yahya, 2013). The typical activities conducted in the classroom would engage students in a real communication such as role-plays, dialogues, games and problem-solving activities (Lindsay & Knight, 2006).

Due to the development of CLT, other newer language teaching such as Cooperative Language Learning, Content- Based Instruction and Task- Based Language Teaching can be claimed to incorporate some principles relating to CLT (Richards & Rodgers, 2001). However, these teaching pedagogies differ in the process of teaching and learning. For instance, Cooperative Language Learning emphasizes on the instructional factors. It maximizes the use of cooperative activities which involve

pairs and small groups of learners in the classroom. Learners are expected to work collaboratively with the other group members to complete the tasks provided by the teacher. On the other hand, the teacher has to facilitate the learning by helping the learners and groups if any questions arise. At the same time the teacher has to create an environment that encourages classroom discussion (Richards & Rodgers, 2001).

The other language teaching pedagogy that holds some principles of CLT is Content – Based Instruction (CBI henceforth). This language teaching stresses on the content or subject matter as primary importance in the teaching (Richards & Rodgers, 2001). The language input and the modes of learning must be authentic to the study of the subject. The achievement of the content course objective can be used to measure whether the language learning objective has been achieved. In this method, learners are expected to be an active interpreter of the input. The teacher needs to be well-informed and knowledgeable of the content, so that they are able to extract the knowledge from the students. Besides, there is also Task- Based Language Teaching (TBLT henceforth).

It is a language teaching method that focuses on the process of communicating through task which learners need to complete through the target language. TBLT involves task which is done in a classroom where learners will engage in comprehending, manipulating, producing and interacting in the target language. At the same time, their attention is focused on the meaning instead of form only (Nunan, 1989). In addition, Ellis (2003) also mentioned that, it is an approach which accommodate opportunities to students to involve in the authentic use of the target language through the task in the natural, practical and functional use of language for meaningful purpose (Lin, 2009). According to Richards and Rodgers (2001) and

Brown (2007) this language teaching approach claims that the goal is to develop "communicative competence" in learners and focus to all the four language skills. This approach employs three stages which are pre-task, during task and post-test (Najjari, 2014).

As the communicative approach towards language teaching was blooming there were also other directions of language teaching such as Community Language Learning, The Silent Way, Suggestopaedia and Total Physical Response. Although these language teaching were not as commonly used as the communicative approach by second or foreign language educators, these methods can still be seen to influenced many of the teaching learning process (Richards & Rodgers, 2001). On top of that, there were also Humanistic Approach and Lexical Approach as another way to language teaching.

Humanistic Approach is an approach where students are asked to utilise their own lives and feeling in the classroom. The activities designed are the activities that make students feel good and remember happy times. Whereas the Lexical Approach is an approach that teach phrases by showing words in combination. Despite the fact that they are a lot of language teaching approaches and methods that available, yet it is exceptionally difficult to come to conclusions on which approaches, and methods is the best and most appropriate. Therefore, Harmer (2001) has outlined some conclusions in order to choose the best and most appropriate approaches and methods such as choose the approach or method that allows students to be exposed to the target language as it is significant in language acquisition. Besides, that approach or method must also let students to receive comprehensible input simultaneously perform

communicative activities. Furthermore, he also added that teacher should consider TBLT in choosing their language teaching as TBLT offers real learning benefit.

# 2.3 ESL teaching and learning in Malaysia

The British colonial education system introduced the teaching of English in Malaysia dated back in 1816 with the opening of Penang Free School. Prior to that, education in Malaya was in the form of religious schools. British then set up English primary and secondary schools. It also during this time the growth of the rubber and tin industry were budding. Thus, the British brought a large arrival of Chinese and Indian migrants into Malaya. These different ethnic groups then set up their own schools and there was no standard English curriculum. There were four mediums of primary schools before Malaya independence which are 'National schools' employed Malay, while 'National type schools' used English, Mandarin and Tamil as the mediums of instructions (Foo & Richards, 2004). In Malaya's move toward independence, the report of the Education committee, known as Razak Report recommended that Malay would be the medium of instruction, the teaching of Malay and English as compulsory subjects, the introduction of a common content syllabus and the National Education policy was to be implemented within a period of ten years.

Malay is the national language under the terms of Malaysian constitution while English is the co-official language on Malaya independence, 1957. In 1960, a committee under the chairmanship of Abdul Rahman bin Talib (Minister of Education then) was set up to review Razak Report. The ultimate purpose was to make Malay the main medium of instruction. Rahman Talib Report has made a following recommendations:

- Uphold the recommendations of Razak Report
- To have bilingual (Malay & English) medium of education in schools. It hoped to unite all the races in Malaysia
- To set up 'remove classes' for students from vernacular schools
   where students spent one extra year learning English/ Malay.

The Education Act 1961 was formed based on the two reports, in which defined the Malay medium schools as national schools and vernacular and English medium schools as national type schools.

After the inter-ethnic riots, in July 1969, all subjects to be taught in Malay in all national type English schools in stages as issued by the Ministry of Education. In January 1970, English medium schools would be phased out in Malaysia. It also marks the beginning of English as a Second Language Education in Malaysia. As Second Malaysia Plan in 1971 stated Malay was introduced for the teaching of all the subjects in primary schools by 1975 and in secondary schools by 1982 (Asmah Omar, 1984).

This was also relevant to tertiary level of education in which the instruction's medium was shifted from English to Bahasa Melayu for all their courses. (Too, 2017). In 1983, the full conversion was completed (Gill, 2005) and was extended to Sarawak and the change of medium of instruction was completed in 1985 for Sabah and Sarawak.

In 1996, the Education Act allowed all private tertiary education institutions to use English as instruction's medium (Education Act, 1996). This was also to attract foreign students to enroll and study in Malaysia. On the other hand, for public universities, the conversion of instruction's medium to English was effective in 2005

and that was only for Mathematics, Science and Technology courses (Middlehurst & Woodfield, 2004). In 2015, as stated in the Malaysian Education Blueprint 2015- 2025 (Higher Education), English language has gained important role in all tertiary education institutions.

# 2.4 Approaches and methods of ELT in Malaysia

According to Bawani Selvaraj (2010) there are three phases of English Language Teaching (ELT henceforth) curriculum in Malaysia based on instructional method and approaches. The first phase was between 1957 until 1970. During this phase there were three different instructional methods implemented. There were TGTM, TDM and Situational Language Teaching. In TGTM learners were required to memorize grammar rules and little attention was given to speaking and listening skills. Upon realizing this method was not effective in making learners to communicate effectively in the working environment, the government later shift to TDM.

TDM is a method in which the mean of instructions and communication is the target language only in this case English and avoid translation in the classroom. This method also emphasizes on learners' oral ability. However, Richards and Rodgers (1986) stated that as cited in Radzuwan Ab Rashid et al. (2017), this method is found impractical, it was due to teachers spending hours just to explain new English words as no translation is allowed in the classroom. Later, the TDM is replaced by Situational Language Teaching approach which stresses on the mastery of high frequency vocabulary. It brought back the repeating structural patterns through oral practice like TGTM.

The second phase was between 1970 until 1990, during this duration of time, the instructional method used was emphasizing on the communicative approach. It is an approach that focuses on communicative competence than linguistics competence. This led to functional syllabus that emphasized learners to be able to communicate in English. The regular activities done in the classroom were pair work, group work oral exercises while grammar rules were to be obtained alongside the communicative process (Richards, 2006 as cited in Radzuwan Ab Rashid et al., 2017). A committee has been set up to design a syllabus for English Language Teaching in the national primary schools which is The English Syllabus for use in Standard One to Standard Six (Foo & Richards, 2004).

The advocates use the Structural Situational Approach to language teaching or the Oral method. After completed this syllabus, the students then continue to the lower secondary schools. The new syllabus for lower secondary is known as The English Syllabus for Tingkatan / Form One to Form Three of the Secondary Schools in Malaysia. This syllabus has also used the same approach in teaching language. Subsequently, they continue learning in Form Four and Five which the syllabus called The English Language Syllabus in Malaysian Schools Tingkatan Empat— Tingkatan Lima. Basically, this syllabus implemented a task-oriented and situational syllabus.

However, in 1974, upon realizing the importance of Malaysian to be fluent in English, the Malaysian Curriculum Development Centre has recommended CLT for English Language syllabus. According to Ramiza Darmi and Albion (2013), CLT is also used as syllabus for English language learning at universities. This is done in order to engage learners in real-life communication whenever they learn English language. As a result, university students can be encouraged to participate and involve using

English language during the class activities. (Ramiza Darmi & Albion, 2013). Due to this, the English format for national examinations was revised which now include speaking (oral) skills together with reading and writing skills while listening skills was still untested (Foo & Richards, 2001).

As for the third phase which initiated in 1990, the English language teaching in Malaysia has implemented two different approaches that are CBI in which prepare students to cope with the advancement of science and technology and also Aesthetic approach implemented to internalize reading habits and creative and critical thinking skills in students. In a CBI classroom, teachers are expected to integrate content related to Science and Technology in their lessons. In addition, language is used as a mean of teaching content. On the other hand, Aesthetic approach is implemented is the classroom to promote language appreciation in students. This is done by incorporating literature component in the English language syllabus.

Even though, there is no clear policy that influence the instruction strategy in the classroom in higher education, but the English language teaching is affected by the role of English language in Malaysia, National Education Philosophy, and *Development of Soft Skills for Institutions for Higher Learning* policy (Too,2017).

Too also added in his 2017's study of English language teaching and policies at the tertiary level in Malaysia indicated that Malaysian tertiary instructors are aware of the current language teaching methodologies such as CLT, TBLT and eclectic approach.

## 2.5 Flipped Classroom Model

Flipped Classroom can be categorized under Task-Based Teaching as it emphasizes on doing higher cognitive activities in the classroom (Farah, 2014). Flipped classroom has been around for a long time. Lage, Platt and Treglia (2000) has come up with the term inverted classroom, Novak (2011) with just- in- time teaching and Davis (2013) with inverted learning. Earlier, in the traditional teaching model, the learning process involved going over books or notes before class. According to Gardner (2012), the concept of problem-solving session in the classroom is nothing new as well as providing learning resources for students to review before attending class. However, now that the advanced technological applications have been maturing, the disseminating of the learning material can be viewed anywhere and anytime. Jonathan Bergmann and Aaron Sams are two names that introduce the name flipped classroom.

In this model, what usually happens during class time for example lecture and demonstrations, happens outside of the class (Fraga & Harmon, 2015). Lectures are substituted by videos, reading materials, online chats and other resources (Hall & DuFrene, 2016). Instructors recorded their lectures or prepare the learning materials and post or upload them online for students to watch or read on their own (Hung, 2015). The student's will first be exposed to the new topic as an individual outside of the classroom because it emphasizes on the need for students to prepare before class. Moreover, students will have the freedom to pause, reflect, rewind and listen as much as they want (Abeysekera & Dawson, 2015). This way students can build their understanding and learning by viewing and reading the learning material provided as well as researching online for additional information.

Subsequently, in the class, the students will lead their own learning (Ginnis, 2002). The class time will be used to focus on the application, analysis, synthesis, evaluation and creation - based activities such as debate, role play and group-based or project- based discussions and so on (Kvashnina & Martynko, 2016). Instructor can also facilitate and aid them through their assignments, problem solving exercises in order to achieve higher order learning (Nederveld & Berge,2015; Kvashnina & Martynko, 2016), differentiated instructions and personalized learning (Yarbro et al., 2014).

Capitalizing on these activities, instructors can give feedback and check on each student's understanding. Students who received feedback from instructor will have long term retention of the topic and score higher (Wambugu & Changeiywo, 2008). Moreover, the constant feedback and improvement that the students receive during one-to-one interactions significantly improves learning achievement (Bloom, 1971). This is contrast with the traditional classroom, where students receive instruction in class and work on homework and assignments outside of the class without the help from instructors.

There are four pillars of flipped classroom: F for flexible environment, L for learning culture, I for intentional content and P for professional educators (FLIP) (Hamdan et al., 2013). The flexibility of flipped classroom environment involved the physical layout of the classroom as well as the flexibility of the assessment that objectively evaluate their understanding in a meaningful way for both educators and teachers. Educators are allowed to shift learning modes to cater the lesson or topic such as from independent task to collaborative task. On of that, educators are flexible in

which they can accept the class to be filled with noises from students discussing and asking questions.

The second pillar is educators who wish to implement flipped classroom need to be ready to shift the learning culture. As we are well aware, traditional classroom focuses on the teacher instead of the students. As King (1993) states educator is the "sage on the stage". However, in FC, the teacher-centred culture will shift to student-centred culture. Students will be the focus, and the class time is meant for them to explore in greater depth of the topics. Students will enthusiastically engage in knowledge acquisition by participating in and evaluating their meaningful learning. They can revise content material outside the group learning space, and teachers can make the most of face-to-face classroom interactions to make sure student understand and integrate of the material (Hamdan et al., 2013).

The third pillar is the intentional content. In order to ensure students to understand the concept and acquire procedural fluency, educators need to be careful with the content that prepared pre-lecture. Educators must arrange and provide content that can cater the different needs of students. The content that educators prepare before class time must also be the one that will maximize classroom time.

The last pillar is professional educators. In FC, even though the educator's role is lessened, but they must know when and how to give direct individualized instructions to students. By doing so, educators can help individual student gain conceptual understanding and procedural fluency at the simultaneously. Moreover, they also must be able to actively check on students' understanding, provide students with timely feedback and regularly assessed their students.

However, Chen et al. (2014) have proposed revised pillars for FC for higher education, the revised pillars: F for flexible environments, L for learning culture, I for intentional content, P for professional educators, P for progressive networking activities, E for engaging and effective experiences, and D for diversified and seamless platforms (FLIPPED). They have revised the pillars due to several reasons such as the revised pillars focus more on the content deliver and the activity's delivery, include input from students and lecturer as well as take into account of the importance of computer learning platforms for higher education.

The first additional pillar, or the fifth pillar is progressive networking activities is where the students in FC, learn by doing and learn by networking. This can be practiced as students try to solve the task given by the instructors in the class with their friends. They have to do the task as well as "network" with their friends in order to perform the task. On top of that, this term not only covers classroom activities, but also online activities. Once the instructor has shared or uploaded the online learning content, the students will depend mostly on the online learning platform which mostly use social media and online networking as supplementary tool (Chen et al., 2014). This is also especially important for tertiary education students as their learning are no longer take place inside a physical classroom. Instead, students can learn from using smart phones and laptops, they can learn at any time and any places as well as via multiple online platforms (Hastie et al., 2010). Therefore, educators need to accommodate their students different learning styles.

The sixth pillar is engaging and effective learning experience. In shifting the learning culture from teacher-centred to student-centred, students usually experience transactional distance when they are doing their individualized learning online.

Transactional distance is a communication and psychological distance between instructors and students. It is because they cannot communicate or interact with the instructor. For example, at home, during the self-pacing pre-lecture, the transactional distance will be high as students cannot ask and express their confusion to their instructors. Simultaneously, their instructor will also not know how much their students comprehended the online learning material. Due to that, instructors must know how to decrease transactional distance. They can decrease it by having an engaging and effective learning experience such as having good instructional skills, strategies and attitude to encourage positive learning environment (Chen et al., 2014).

Next, is the seventh pillar which is diversified and seamless learning platforms. According to Chen et al., (2014), the platforms used for FC need to be varied especially from online platforms such as Facebook and other social media platforms. The added the platforms must also facilitate self-paced home learning. This could include that the platforms have features where students can have discussion and interaction with their instructor and their friends.

## 2.6 Cognitive Load Theory

The fundamental of Cognitive Load theory is that human cognitive capacity in working memory is restricted. Therefore, the best way to overcome this is by creating instructional design that prevents the overloading of cognitive load and optimize the working memory capacity (DeJong,2010). The basic components of Cognitive Load theory are working memory and long-term memory. Short-term memory or working memory is the part of the memory that is used when an individual is processing what he/she is doing at the moment. It is used for all of the tasks he/she is aware of and can be monitored.

However, working memory is restricted as it can only hold around seven items of information at one time (Miller,1956). Apart from holding information, working memory can also organize, contrast, compare and process the information. Therefore, an individual can only process two or three items at the same time (Kirschner, 2002). On the other hand, long-term memory can hold substantial amount of information permanently. (Kirschner, 2002). It is what an individual used to justify and comprehend what he/she is doing at the moment. Long-term memory is believed to be limitless and stored long-lasting record of the information that has been learnt.

Cognitive Load theory stated that learning can be hindered if the capacity of working memory has surpassed its capabilities during a learning task (DeJong, 2010). Due to that, Cognitive Load theory suggests to fully utilise the working memory capacity, the instructional design must optimize the schema construction in the long-term memory. Schema can hold a large amount of information that has been learnt and it is processed as a single unit by working memory. Thus, schema reduces working memory load (Kirschner, 2002). If the learning process or schema construction has happened frequently, it can lead to schema automation. As a result, if an individual face the same task, he/she can perform the task easily. In a nutshell, scheme construction and automation facilitate the storage and the information management in long-term memory, simultaneously reduces the load in working memory.

This theory also make distinction among three different types of cognitive load. There are intrinsic cognitive load, extraneous cognitive load and germane cognitive load. Intrinsic load is the part of the load that is set by the innate elements of the task or the subject itself. Extraneous load is the load imposed by the instructional component or demand that is utilised in presenting the information. Finally, Germane

load is the load set as a result of schema construction or learning process (DeJong,2010). According to Sweller (1994), Cognitive Load theory asserts that intrinsic load cannot be modified by instructional treatment, however extraneous and germane load can be determined by the instructional treatment. Therefore, if the instruction is designed poorly, the extraneous load will be imposed as it is the effort to process poorly designed instruction. On the other hand, the effort that contributing to learning will be the germane load. Nonetheless, according to Kirschner (2002), the instructional treatment can only be working if it stays within working memory capacity.

# 2.7 Flipped classroom and previous studies

Researches on FC on different fields and a lot of the time with undergraduates' participants have developed in the past few years. Among the researches include Architectural Engineering course (Zappe et al., 2009), Agricultural Economics (Gardner, 2012), Information systems field (Davies, Dean, & Ball,2013), Pharmaceutics course (McLaughlin et al., 2014), Advanced Statistics (Touchton, 2015), and Business and Economy (Nanclares & Rodriguez, 2016).

Among the findings of the previous researches, most of the researchers aim to investigate FC influences on the students' performance. Among the researchers that found this model has positive influence on students' performance are from Architectural Engineering course, stated that FC has helped them learn (Zappe et al.,2009), while Adult Health courses (Missildine et al., 2013) and Business school (Foldnes, 2016), found that flipped classroom improved students' performance, Pharmaceutics course discovered that this model increase students' exam performance (McLauglin et al., 2014), as for English language learners, the finding has yielded that

this FC is an effective instruction than traditional approach (Hung, 2015). In an Advanced Statistics class, students performed slightly better on the final projects after the implementation of this strategy and Psychology students noticed that this strategy gives positive impact on their academic performance (Little, 2015).

However, there were also other researches that did not turn out the same as the above researches. Fraga and Harmon (2015) stated that there were no significant differences between flipped classroom and traditional model in terms of academic achievement. Gardner (2012) faced the same result and indicated that even though students show prominent level of satisfaction, but there were little evidence suggesting how the students learn and the relation between their satisfaction and final grade. Besides that, some of the negative results yielded from other previous researches are students still prefer lecture-based instruction due to the extra time they have to spend on watching and reading before class (Forsey et al., 2013).

Furthermore, students also mentioned that schoolwork does not deserve their time, as they regard it as part-time job (Brint & Cantwell, 2010). In spite of these discouraging results, several ways have been discussed and considered by the researchers to improve these situations. One of them is for the teachers or instructors to carefully prepare the content for viewing before class and the elements and activities that need to be carried out in the class (Danker, 2015). On top of that, Basal (2015) also added that, the effectiveness of FC is determined by the teacher who is conducting it. The teacher's task is more than just knowing the relevant theories but also to select appropriate and engaging activities for classroom time and having connected with the students online.

As for some of the limitations such as reliant to technology (Zuber, 2016) and extra time prior class (Brint & Cantwell, 2010; Forsey et.al,2013; Fraga & Harmon, 2015), teachers can resolve this by creating and editing videos that should be shorter in duration such as less than 20 minutes (Zappe et. al, 2009) and the videos should be in a format that can be accessed via various means such as laptops, tablets, smartphones, computers and so on (Danker, 2015). Students also need to take the initiatives to go to the library to review and watch the videos online if they have no internet connection at home (Danker, 2015).

As for the implementation of FC in teaching English, there are a few researchers that have examined the affordance of this language teaching strategy with their studies. Webb et al. (2014) have examined the effects of flipped classroom with 35 participants in a university in Macau. The students enrolled in English language course which is a requirement for General Education. From the data collected, which were questionnaires to the students and teachers' reflections, the researchers stated that initially students did not like the teaching strategy but as they went along gradually, they became attuned to it and even wanted more online instruction at the end of the semester. As for the teachers' perspectives, three out of four of them supported this model to be implemented in their classes.

Sung (2015) also found the same result where 12 students who participated in English Curriculum and Evaluation in Kyung Hee University, Seoul at first face difficulties adapting however from their works it showed that the students viewed this strategy positively. Another English lesson themed that has applied FC is from Hung (2015), in which he administered three different formats of instructional design. The three formats were structured, semi-structured and non-flip units. It was a quasi-

experimental design which is done through WebQuest for the structured flipped classroom unit. As for the semi structured unit, the researcher used Ted Ed as tool. As for the non-flip unit, the class is a traditional classroom. The findings from the seventy-five students from Taiwanese University who signed up for communicative English has demonstrated that this model is feasible to facilitate small groups of English language learners. On top of that, this study has yielded generally positive results on the students' participation, satisfaction, and performance.

In the case of teaching writing, according to Baranovic (2013), with fifteen Southeast Missouri University students, in an English composition subject, FC was somewhat more successful than the traditional class. He added based on the data from the survey, anecdotal evidence, classroom observation and commentary in the argument essays, students' writing skills have improved, and it developed at a more accelerated pace. Besides that, Farah (2014) who has also conducted FC in Abu Dhabi's technical school, found that the students that has received the FC intervention outperformed those in controlled group in their IELTS writing Task 1 and Task 2 overall score. Furthermore, majority of the forty-seven female students has shown positive attitudes towards this strategy and their feedback were mostly encouraging and promising.

The same result was produced by Elfatah and Ahmed (2016) from a research done in an English writing class in Qassim University. After three months, the researcher who has used the pre-test and posttest of EFL writing test as well as questionnaires, discovered that the experimental group performed better that the control group. The students in the experimental group also have improved in their writing skills involving ideas and content, organization, voice and style of an essay.

As for their reaction to the strategy, the gave positive remark on benefit of the use of class time. A research done in University of China also noted that from the experiment and questionnaire conducted to seventy English major sophomore students proved that there was a significant difference between FC and traditional teaching (Nie, 2015). The students' essays were more meaningful and impactful. Moreover, the students were also more competence.

From a Southeast Asian context that has applied FC to investigate its effects on writing ability was done by Afrilyasanti et al., (2016). In a secondary school setting, a pre- test and posttest were performed to see the writing scores. Besides that, the data was also combined with an observation checklist to examine the students' writing ability as well as students' learning styles. The data collected has yielded that the students achieved better writing ability as a result of the treatment. The researchers also mentioned that throughout the three stages of writing, the students were actively involved. They also added, the collaborative works form both teachers and peers elevated students' writing. It is because the feedbacks and comments received by the teacher and peers in their writing process helped them to improve their writing.

## 2.8 Flipped Classroom in Malaysia

In Malaysia, many studies have been conducted and performed on FC from various fields and levels. Some of the studies that have been done in primary education are by Kumar and Baranovich (2018), Teo and Ramesh Sathappan (2018), Lee (2019), Sakinah Zakaria and Melor Md. Yunus (2020) and Md Fadzil Masri and Zamri Mahamod (2020). Among these studies, Kumar Shoba Vijaya and Baranovich (2018), Teo and Ramesh Sathappan (2018) and Sakinah Zakaria and Melor Md. Yunus (2020) have conducted their studies in primary education ESL classroom settings. Based on

their findings, FC had given positive impacts on the students' learning. The students have also positively perceived that FC would improve their understanding of the English subject.

As for Md Fadzil Masri and Zamri Mahamod (2020), they explored the effectiveness of FC method in Bahasa Melayu classroom. The study was conducted with Primary 6 students in Sabah. The students were taught to write an essay by using FC. The findings have shown that FC enhances students' ability and skills to write an essay. Furthermore, the students also managed to compose the essay on their own. Lee (2019) conducted his study with upper primary students who attended Science subject at an enrichment centre. From his study, parents concurred that FC is more effective than traditional class. Moreover, the students also said that they gain more benefits during FC lesson.

FC model has also been implemented in secondary school settings in Malaysia. Azlina A. Rahman et al. (2019) have conducted their study with 61 secondary students for Mathematics subject. Based on their results, FC has been proven to have positive impacts on overall students' achievement. The students' performance also has shown significant improvement. Mohd Zamri Abdullah and Mustafa Mamat (2018) investigated the effects of FC on students' motivation in Additional Mathematics classroom. The participants were Form Four students from National Islamic Secondary School in Kelantan. The study has yielded that the teaching and learning of FC enhance students' motivation towards the subject.

In addition, the students were also able to improve their cooperation during discussion. Subsequently, this reduces their fear of the subject. There was also a study

done by Mohd Ariffuddin et al. (2019) that showed FC model improved form four students' academic achievement in a Chemistry class. Additionally, FC also boosts the students' level of interest in acid and base topics. Likewise, in a study done by M.Kaviza (2019), FC has shown to develop students' critical thinking in History class effectively. M. Kaviza (2019) also stated that students are motivated to actively participate in the discussion of the subject, whether it was inside or outside of the classroom.

FC has also gained recognition particularly in Malaysia tertiary education setting because many studies affirmed its effectiveness in learning and teaching. According to Bawadi Abdullah and Muhammad Tazli Azizan (2017), FC effectively improves Chemical Engineering students' performance in terms of grades and understanding. After implementing FC, the students stated that they enjoyed the lesson and the number of students who obtained grade A for Transport Phenomena course also has increased. Farina Norzakiah Tazijan et al. (2016) also mentioned that FC promotes active learning as well as their students' verbal communication skills in ESL class.

Similarly, the same result has been obtained by Charanjit Kaur Swaran Singh et al. (2018) with Institut Kemahiran Belia Negara students. The participants were from Food and Beverages trainees who have watched You Tube videos prior to their lesson in class. Subsequently, the students managed to prepare and build their confidence and ability to engage with their classmates during class.

Goh and Ong (2019) mentioned that FC is very beneficial for a challenging course such as Pharmacy course. It is because the FC approach facilitated in

stimulating learning interest. They also added that for FC to be successful, the role of educators, the feasibility of the approach and the students' acceptance were important.

In a like manner, Umawathy Techanamurthy et al. (2015) also concluded in their study at a selected Community College that FC encouraged students learning. Furthermore, the students' problem skills are improved due to authentic and real-world problems during the instruction. A study was conducted in a private university setting by Sherina Shahnaz Mohamed Fauzi and Raja Maznah Raja Hussain (2016) with 24 communication students. The findings concluded that FC was able to facilitate active and reflective learning processes during FC instruction effectively.

#### 2.9 Conclusion

This chapter reviews the history of English Language teaching in Malaysia and key concepts of flipped classroom model that will be carried out in the study. Moreover, this chapter also reviews FC previous studies that have been conducted in Malaysia. This chapter will be developed further after series of discussions and readings. In the next chapter, the methods of carrying out the study will be discussed.

#### **CHAPTER 3**

#### METHODOLOGY

#### 3.1 Introduction

This chapter presents the methodology of the study. This study was conducted using a qualitative method, to report on the use and strategy of Flipped classroom model in Malaysian ESL classroom. As described by Creswell (2013), this method is significant when an issue needs to be explored. In addition, Caicco (2016) stated that qualitative method is ideal when a complex and a comprehensive understanding is needed in the study. In this case, in order to investigate the virtual and physical strategies used by the university lecturers, thus this study requires the researcher to obtain detailed and in-depth practices used in the FC lessons from the participants as well observing the actual teaching and learning in their ESL classrooms.

On top of that, this method was used in favor of obtaining the understanding of how students and lecturers involved and perceived this pedagogical strategy. This chapter starts off with section 3.1 which presents the research context including the selection of participants and selection of research site. Section 3.2 presents data collection methods involving classroom observations and semi-structured interviews. Next, section 3.3 talks about data how the data were analyzed. Subsequently, section 3.4 discusses on ethics and trustworthiness and follows by conclusion of the chapter in section 3.5.

#### 3.2 Research context

In this section, the researcher describes the participants who were involved in this study. After the description of the participants, the researcher explains the locations which the study was conducted along with the justifications of why they were selected.

#### 3.2.1 Selection of participants

In this section, the researcher describes the participants that were involved in this study. Besides, the justification of why the selected participants were chosen will also be explained in this section.

#### 3.2.1.1 Lecturers

The sampling for this study was purposeful sampling due to the criteria that need to be fulfilled. The sample consists of two (2) English lecturers who came from different English backgrounds and teaching experiences. The participants have different academic qualifications, yet they are both fully trained English lecturers. One of the participants has a bachelor and master's degree in (TESL) or Teaching English as a Second Language. The other participant has a bachelor's degree in (TEYL) or Teaching English for Young Learners and a doctorate degree in Curriculum and Instructional Technology.

Thus, researcher could gather different experiences and perceptions. Simultaneously, the researcher could strengthen the findings of this study. This study investigated the strategies used by these lecturers who are English lecturers and teaching English subjects. These lecturers were selected based on certain criteria such as their experienced in teaching English which have exceeded five years, they also must currently incorporate some aspects of FC in their pedagogy and possess

experiences in teaching via traditional classroom pedagogy. The rationale behind their teaching experience must exceed five years was because the participants to need to have enough experience in applying various teaching methods and handling their students. On top of that, according to Jowaty Juhary and Ahmad Fahimi Amir (2018), novice lecturers will usually avoid incorporating technology in their lesson because they are lack in teaching experiences.

On top of that, the reason of looking for participants who currently incorporate some aspects of FC in their lesson was because though FC is implemented vastly in higher education, still it is relatively rare for ESL lecturers to implement FC lesson fully. Besides, the researcher also needed participants who possess the experience in teaching traditional classrooms in order to elicit the difference between FC and traditional classroom lesson. Moreover, these criteria are chosen based on the possibility that will influence on the strategies that they will use in the FC lesson as well as their perceptions of this pedagogy.

The participants (the ESL teachers were the main participants of this study) then were asked to read, understand and sign a consent form related to this study. Prior to that, they were briefed on the research purposes, procedure and what are expected of them for the data collection. They can also withdraw from the study at any time during the conducting of this study. For the purpose of this study the participants real names are not used, and pseudonyms are given to them namely Della and Eva. All of their information will be kept confidential.

#### **3.2.1.2 Students**

Besides the lecturers, there were eight (8) students involved in this study. The researcher requested each lecturer to select at least four (4) students who are advanced and intermediate or lower level of proficiency to be interviewed after each lesson. The reasonings for this criterion were to clarify the response and to cross check with the students regarding the practices that their lecturers used for FC lesson. It is because students from different level of proficiency might give different responses.

Each of the students' interview was audio-recorded. It was done individually or in pair. The rationale of doing it in pair was to make the students feel comfortable in answering the researcher's questions, especially the lower-level proficiency students. The researcher also offered the lower-level proficiency students to conduct the interview in Bahasa Malaysia, however, they refused and willing to answer in English.

For the purpose of this study the participants real names are not used, and pseudonyms are given to them namely Ammar, Firman, Imran, Leela, Alice, Natasha, Shawn and Victor. Prior to that, they were briefed on the research purposes, procedure and what are expected of them for the data collection. They can also withdraw from the study at any time during the conducting of this study

#### 3.2.2 Selection of research site

This study was conducted in selected private tertiary institutions which were XX University and YY Business College, located in the city of Kuala Lumpur and Shah Alam, Selangor respectively. XX University was founded in 1986 to provide

affordable quality educational opportunities for Malaysians. It offers extensive and various programs ranging from business, law, management, economics, IT, the social sciences, and the humanities at undergraduate and graduate levels. Majority of the students are Malaysian Chinese, while the rest comes from other Malaysian races such as Malay and Indian. XX also has international students.

On the other hand, YY Business College was founded in 2016. It is built on the belief that it can produce graduates with entrepreneurial belief. As it is still new, it only offers three undergraduate programs which are Diploma in Accounting, Business Management and Entrepreneurship. The students are all Malay. English subject is a compulsory subject for every program.

#### 3.3 Data collection methods

As a qualitative study, various sources were used to collect data for this study. Those sources were classroom observation which includes observation forms, field notes and video-recordings of the lessons. Next, document analysis was used in this study. The researcher also conducted interviews with the participants.

#### 3.3.1 Classroom Observation

The researcher carried out three classroom observations to answer first research question which is: the strategy used by the university lecturers. Observation form, field notes and video recordings were used to record and collect data from the observations. The purpose of this data collection was to observe and gather data on pedagogical behavior in the classroom. In order to analyze the pedagogical behavior, the researcher used an observation form. It is a form which has checklists of pedagogical behaviors that are suggested to be conducted in an FC lesson.

The procedure was overt which all of the participants know that they were being observed. The classroom observation was scheduled for three (3) lessons for every participant. The duration of the lesson was one (1) hour and thirty (30) minutes for Della and three (3) hours for Eva.

The observations were arranged after some discussions with the participants regarding the appropriate FC lessons which could help the researcher to observe the FC strategies and activities. It is because, as mentioned earlier the lecturers could not always incorporate FC in their lessons. The discussion is done before the actual observation by negotiating and considering the lecturers' schedule, weekly lesson plan and institutions' activities. The classes were chosen by the participants themselves as the freedom was given to them to choose which class, they that they think most comfortable with to implement FC.

The observations were carried out for a duration of 3 months depends on the participants time and availability. The duration of time was to get the precise data from the lecturers and students throughout the FC lessons that was conducted. The observation form has three (3) sections. The first section the researcher looked into the warm- up phase of the lesson. The second is the practice phase which is to see how the lecturer plan flow of the activity in the class. The next section inspected how the lecturer wrap up the lesson which is the wrap up phase.

While completing the observation form during the lesson, the researcher used one video recorder to record the entire process. This is done as it is crucial to ensure participants observed were performing genuinely for data analysis. Before the observation starts, the researcher clicked the 'play' button on the camera exactly two

minutes before the recording starts. However, due to technical issues, there was one recording which could not record the audio. Therefore, the observation for the no audio lesson was only based on field notes which specifically focus on the strategies used in the classroom.

In addition, one of the participants also requested not to be video-recorded due to privacy concerns. Thus, for the observations in her class, the researcher used audio-recoding along with taking field notes and filling in observation forms. As for the pre-lecture observation, the researcher could not get the data as both participants requested not to reveal the interaction, they had on the online learning platforms due to privacy concerns. In order to solve this, the researcher performed document analysis as well as semi-structured interviews to collect the data about the pre-lecture lessons.

#### 3.3.2 Document Analysis

The researcher also gathered documents such as videos, PowerPoint slides, and infographics which were used for the out-of-class lessons by the lecturers. All these documents were emailed by the lecturers. The documents were analyzed to solicit the justifications and relevance of the content and material that were chosen by the lecturers for their FC lessons. Other than the documents that were used during prelecture lessons, the researcher also analyzed the observation form that was used during the classroom observations. The analysis of these documents was crucial to answer the first research question which is exploring the strategies used in FC lessons. After collecting these documents, the researcher carefully identified and incorporated similar themes found from the analysis with the classroom observation and the interview transcripts.

#### 3.3.3 Semi-structured interviews

Semi-structured interviews were also done by the researcher with the lecturers and selected students, to address the second and third research questions: What are the perceptions on the use of Flipped Classroom model in the selected tertiary institution and the challenges faced in the Flipped Classroom model lesson? This is important to gain the participants' views on the experience they had when conducting FC along with the challenges or obstacles that they faced.

The questions for the interviews were validated by one of the English coordinators and an English lecturer at a private university in Malaysia which incorporates FC model in their teaching. There were 20 questions for the students which related to the pre-lecture lessons, in the class lessons and their experience on FC. As for the lecturers, there were 22 questions asked which related to their backgrounds in teaching, experience in teaching traditional classroom and FC as well as their strategies to conduct FC.

Besides, the interview was also to sought confirmation from the participants responses with the actual practices that they did in the classrooms. The interviews were carried out with lecturers and individual students after each lesson has completed. They were carried in a place convenient to the lecturers and the students.

The interviews done with the lecturers were done separately from the students. The lecturer did the interview before class, and the students were interviewed after class. The interviews were all fully conducted in English. In addition, all the interviews were audio recorded.

As mentioned earlier, due to privacy concerns, the researcher had also interviewed the participants in order to get their responses in conducting the pre-lecture or virtual lesson. The lessons were conducted on their online learning platforms such as WhatsApp and Telegram applications. This is done to address the first research question. The data from the interview were triangulate with the online learning content that the lecturers have shared with their students such as the videos, the PowerPoint slides as well as the infographic image.

## 3.4 Data Analysis

The data analysis is done by describing about what happened out of the classroom and in the classroom with more details for significant and prominent features in answering the research questions. The researcher also employed thematic analysis (Alholjailan, 2012). According to Alholjailan (2012), thematic analysis is used to analyze classifications and present themes (patterns) that relate to the data systematic way, and once themes are identified, the researcher provided rich details and interpretation by looking into data organized under themes.

After collecting all the data, the raw data is analyzed by transcribing them verbatim and then typed in Microsoft Word 2007 format. Next, the researcher made a few notes in order identify and recognize any significant and prominence features from the texts, after reading the transcribed data a few times. Then, the researcher formed initial codes to group and categorize the data based on the same features. Subsequently, the initial codes were examined again to avoid any redundancies and overlapping codes.

Then, the researcher arranged all the themed codes and episodes to Microsoft Excel 2007 spread sheet. The themes then, were drawn in mind map along with explanations in order to enable researcher to see their connections to the research questions of the study. As a result, the employed qualitative methods have assisted the interpretation of data which cannot be objectively measured and quantified.

Table 3.1

Data collection and data analysis according to research questions

RESEARCH QUESTIONS		SOURCE OF DATA	DATA ANALYSIS
1.	What are the Flipped Classroom Model strategies used by private tertiary education lecturers?	<ul><li>Classroom observation</li><li>Document analysis</li><li>Semi-structured interviews</li></ul>	<ul><li>Transcribing</li><li>Thematic coding</li><li>Coding and interpreting</li></ul>
2.	What are the lecturers' and the students' perception of the Flipped Classroom Model lessons?	Semi-structured interviews	<ul><li>Transcribing</li><li>Thematic coding</li><li>Coding and interpreting</li></ul>
3.	What are the challenges faced by the lecturers and students in Flipped Classroom Model lessons?	Semi-structured interviews	<ul><li>Transcribing</li><li>Thematic coding</li><li>Coding and interpreting</li></ul>

## 3.5 Ethics and trustworthiness

This current study utilised the triangulation of several data and sources including classroom observations, semi-structured interviews with two ESL lecturers, and students from their respective classes. With these data sources, the researcher was able to detect any inconsistencies in the findings, and in the explanations and elaborations

for the future chapter. The pedagogical strategies observations in the classroom were strengthened by the video recordings as well as the observation form and field notes.

Besides, the perception received from the lecturers were cross checked and validated with the interviews and observations. The perceptions from the students were cross checked and validated by the interviews done with them. The audio recordings are the proof of their responses. The use of two participants also helped to confirm their similarities and differences in implementing FC strategies in their lessons. In addition, to avoid the researcher's biasness, member checking was done by the researcher. The researcher asked a few ESL colleagues to check the initial codes as well as the interview transcripts of this study.

In this study, it is important to obtain informed consent as it involved human subjects who were observed and interviewed. This is in line with Merriam (1998) who emphasized that researcher needed to pay a lot of attention on ethical issues especially during data collection and data analysis. The data was collected in a way or manner where the researcher was aware that imposing discomfort or inconvenience to the participants will cause discrepancies to them. Thus, the participants were briefed about the procedure. Therefore, they were given consent form to make sure they agreed and understood the condition of this study, and what are expected from them. The researcher also explained to them the benefit of this study, as it will enhance their understanding of their pedagogical strategies used in the classrooms.

# 3.6 Conclusion

This study employed the qualitative method that involves classroom observations of two ESL lecturers in selected tertiary institutions. Besides, it also carried out semi – structured interviews with the participants and their students. In addition, document analysis was performed to enrich the findings of this study. Most of the classroom observations were video recorded, and all the interviews were audio recorded.

#### **CHAPTER 4**

#### **FINDINGS**

#### 4.1 Introduction

This chapter discusses the study's findings. It describes the findings based on the classroom observations and responses from the semi-structured interviews that have been conducted. The following research questions navigate this study comprehensively:

- 1. What are the Flipped Classroom Model strategies used by private tertiary education institution lecturers?
- 2. What are the lecturers' and the students' perceptions of the Flipped Classroom Model lessons?
- 3. What are the challenges faced by the lecturers and students in Flipped Classroom Model lessons?

The findings are firstly organized by describing the participants. After that, the chapter continues to describe the strategies used by the lecturers online and in the classroom. This is followed by presenting the themes that represent the lecturers' and students' perceptions of Flipped Classroom. Subsequently, it will further elaborate the presentation of themes on the challenges that are faced by the lecturers and the students in Flipped Classroom lessons. Finally, a summary will be presented to conclude the chapter. The theme for the findings will be categorized under the context of the research questions.

## 4.2 Participants

The researcher interviewed the lecturers and observed their classrooms in order to obtain the strategies used in their FC lessons.

#### **4.2.1** Della

Della started teaching in tertiary education from 2011 as a part-time lecturer in a public tertiary institution in Perak. She worked there for one year and then moved to a private institution in Kuala Lumpur while pursuing her doctorate degree in Curriculum and Instructional Technology at University Malaya. Her interest has always been investigating on how the use of technology could be incorporated in ESL classrooms even though her bachelor's degree was in Teaching English for young learners from Universiti Utara Malaysia. She has been teaching at her current institution for almost six years. With the encouragement from her institution to incorporate technology in her teaching, the current semester is her third time implementing flipped classroom in her lessons. Della mentioned that most of her students are the intermediate level of proficiency. They are foundation students who will pursue their bachelor's degree after attending a one-year course in the current institution.

# 4.2.2 Eva

Eva has teaching experience for almost twelve years in tertiary educations. Eva was a student of University of Selangor for her bachelor's degree which was in Teaching English as a Second Language (TESL). After that, she pursued her master's degree in the same field at University of Malaya. Then, she worked with a few private tertiary education institutions before settling down with her current institutions which she has worked for six months now (during the observation). She has a lot of

experience working in a few private tertiary education institutions where she always wants to implement the Flipped Classroom model. This is because she believes the model has its own benefits for her and her students. In her previous institution, with the advanced technology facilities that it provides, Eva implemented FC and found that it benefited her students. Due to that, she also wants to implement the model with her current institution. Her class in the current institution is composed of students of mixed proficiency but the majority of them are low-level proficiency students.

## 4.3 Strategies used in the Flipped Classroom

As mentioned in the previous chapter, this study observed and interviewed two lecturers from two different private tertiary education institutions. The findings are gathered from the online and the in-class strategies that the lecturers executed during the observation, document analysis, and from the semi-structured interviews with the lecturers.

## 4.3.1 Preparation of online learning content

Online learning content is the content prepared by the lecturers for their students before their physical class. This content is uploaded via online learning platform. The lecturers have prepared the content before class and uploaded the content on their online learning platform. However, one crucial process prior to that is the lecturers need to choose what and which content to be flipped.

Choosing content for a Flipped Classroom is very important for lecturers because they need to plan and provide suitable content and can tailor it to the students' need and diversity. This is crucial as students need to be exposed to the online learning

content on their own and at their own pace. In this process, both participants have stated that they did not choose to include all content of their subject to be flipped.

At first, Della mentioned that she randomly chose the content. However, her following statement contradicted the former as she said that she had concerns in choosing the content. According to her, if she feels her students need more help on a particular content and she feels by showing a video might help her students understand, she will flip the content as and when required.

"Randomly choose. There's no specific content that I flipped. Now, for example I feel students need more help on conditional statement, they're very ... don't know when to use the zero, first, second and third. So, I think, video might help them understand better and distinguish between the three conditionals, yea sorry four conditionals. So, I use as and when required.

(Della, Interview, 32-36)

At first, when the interviewer asked how she chose the content for her FC lesson, Della stated that she randomly chose the content, in which there were no concerns in choosing the content or no particular content that she flipped. However, as she continued to explain further, she clearly stated that whenever her students needed more assistance on a particular content, in this case conditional statements, she then would use videos as lecture (materials). She thinks that the video might assist her students in understanding, distinguishing and using conditional statements correctly.

From her statement above, it can be interpreted that Della chose her content based on her students' need to consolidate the content. If she feels that the content can be digested by her students easily, she will just conduct a conventional classroom

lesson in which she will carry out the lecture. However, if she feels that her students need help solidifying the new content, thus, Della will flip her classroom and prepare the online learning content. Some of the contents that Della flipped were Conditional Statements, Argumentative Essays and Editing skills.

Della thought that by providing the online learning content to her students, they would be able to comprehend the content better. The online learning content that she shared could help her students to elicit important key points and thus enhance germane cognitive load. This in turn will facilitate students in developing scheme construction and automation in the long-term memory. As a result, her students will learn and understand the content better.

As for Eva, she mentioned that she only flipped some course content. She further explained that it is essential to know which content needs to be flipped. Her approach somehow is different from Della. According to her, if the content is complicated and she feels that she needs to explain more about that particular content to her students, then she will conduct a conventional class. For the content that is complicated and needs more explanation and guidance, she prefers to explain and guide her students face to face. Furthermore, she said that the process of choosing the content to be flipped also depends on the students' level of proficiency.

"It's wise to know which lesson that you need to flip, not all lesson can be flipped. So, as a subject matter expert, we need to know what kind of content that we can flipped, if it's a complex and you need to explain, then I don't feel that you should flipped. Depending again, it depends on the students' level as well. "

(Eva, Interview, 165-169)

Based on the excerpt, Eva stated that she must be reasonable in choosing which content to be flipped with her students. Due to that, she added not every content should be flipped. As a person who has a deeper understanding of the content, she must choose which content is appropriate to be flipped. According to her, if the content requires higher order thinking skills and needs further elaboration, Eva will not choose that content to be flipped. Nonetheless, she mentioned that most importantly she will choose the content based on her students' English level of proficiency.

It can be interpreted that Eva believes that as the students' lecturer, she must know which content that can be flipped with her students. As she is aware of her students' proficiency level, therefore, she feels it is essential to choose the appropriate and convenient content for students to learn on their own. She will also try to avoid flipping complicated or higher order thinking skills content because she knows her students will not be able to comprehend on their own.

Eva's decision implied that, she wanted to avoid imposing irrelevant and unnecessary cognitive load (extraneous cognitive load) to her students during their learning process. Thus, by providing content that suits her students' proficiency during the pre-class session (which develops germane cognitive load), she hoped her students will be able to understand the content before they come to class. As a result, her students will gain ample information before the class. Therefore, it gives more space for working memory to process information during the in-class activities.

Apart from knowing what and which content to be flipped, choosing the types of online learning content to be used in FC also play a major role in this strategy. Thus, Della employed PowerPoint slides to present her content. However, Della also said

that she mainly used relevant videos which she retrieved from YouTube. Besides, she would also attain content in the form of documents, infographic and images content from Pinterest.

"What I did is basically I get videos from YouTube which are relevant or from... sorry, document from Pinterest, images so on."

(Della, Interview, 28-29)

Della said that she mostly got her online learning content from YouTube website. There are a lot of educational and informative videos that are available on that website. She then chose the videos which are related and appropriate to the lesson requirement. Apart from using online videos; Della also obtained her sources from Pinterest.

Della used content videos from YouTube, document or infographic from Pinterest to share with her students. As she has mentioned, the contents from these sources seemingly have been presented in an attractive and comprehensible way. These sources also made it easier for her students to learn on their own and at their own pace. On top of that, the features from the sources are assumed to help and facilitate her students as they need to learn the content on their own and prepare for inclass activities.

Della took the video of the Conditional statement from YouTube. The video was produced by Anglo-Link and the duration is 18 minutes. The lesson started with the presenter, introducing the topic which is Conditional statements. There are also subtitles transcribing every word that the presenter utters. Consequently, ESL learners with lower proficiency level will be able to understand the presenter.

The presenter further explains and elaborates the forms of conditional statements simultaneously showing the formulation of each of the conditional sentences.

This formulation part is explained by the voice of the presenter. The voice of the presenter is clear and at a moderate pace. Thus, it is easier for ESL learners to follow and comprehend the content. Moreover, the elaboration of the formulation is enhanced with animated wordings that move every time the presenter explains about it. The animated wordings are also presented in different colours to distinguish different conditional's formulation. In addition, there is a yellow animated sticky note that pops up to alert and inform students regarding any essential points.

The video also explains the special cases as well as common mistakes that usually occur in using conditional statements. The video features such as the duration of the video, the subtitle, the presenter's voice, the animated wordings and sticky note as well as the different colours used during the explanation can help students to comprehend the content better. By having these features, the delivery of the new content is easily understood by the students.

On top of that, the convenience and freedom to pause, rewind, forward and replay the video as many times as they wish also facilitate students to focus on the learning process. This is because these video features will remove information and material which do not directly contribute to learning, thus decreasing the extraneous cognitive load. As a result, the features promote germane cognitive load and consequently allow students to engage in schema construction and automation. To put

it differently, students can scaffold new learning content to manage their cognitive load better.

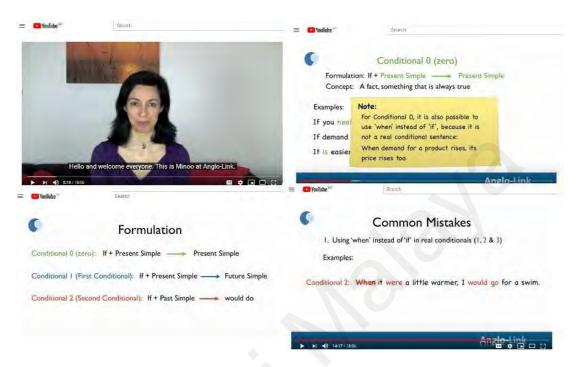


Figure 4.1 Della's YouTube video

As for the PowerPoint slide on Argumentative essays, the slide starts with the definition of the essay. Some of the important key points are bolded to emphasize the meaning of the essay. Next, it also presents on how a strong Argumentative essay should be written and what the writer needs to remember. The slide then continues with reminding on how a writer should avoid bad argumentative in their writing. After that, the slide introduces the structure of an Argumentative essay as well as the suitable language expression that a writer can use for an Argumentative essay.

The arrangement of the content as well as the wordings fonts and colours are interesting which might aid Della's students to comprehend and digest the content on their own. Besides, the content is arranged in bullet form making it easier for students to identify and recognize important points rather than organizing it in an essay form.

The other content that Della flipped was Editing skills. The content presents common editing/writing errors. Della attained this infographic content from Pinterest. The infographic points to some common writing errors such as comma splice, sentence sprawl, lack of parallel structure, dangling modifier and others. For each of the errors, there is a definition or explanation regarding the errors as well as an example of the incorrect and correct use of them. The infographic utilises graphic and colourful features that make learning effective. The content is also arranged in sequential number, which contributes to ease content comprehension.



Figure 4.2 Della's infographic content

The features on the PowerPoint slides and infographic such as putting the content in simple sentences, arranging the content in an understandable manner, bolded wordings, utilizing graphics and colourful features allow better management of the cognitive load. As a result, the extraneous load is lessened due to the graphics and the coloured sentences that help to emphasize the key points.

Moreover, these features also promote germane load as in seeking to achieve effective learning. This is because students should not waste time and cognitive load

resources on content or material which are not relevant for learning. The features also ease the intrinsic cognitive load as these features help in making the content looks straightforward.

As for Eva, during the observation in her class, among the content that she flipped were Paraphrasing, Introductory and Concluding paragraph and Present/Past progressive tense. These content according to her, did not require much explanation thus, she flipped the content. Eva mentioned that she prepared and used PowerPoint slides. Moreover, she also made Buzan mind map, from the template that she got online to share with her student before class.

"Usually will do my own slides, sometimes I don't do slides, I will use Buzan mind mapping. You know there are a lot of template, Buzan mind map."

(Eva, Interview, 67-69)

For most FC lesson that she conducted, Eva created her own PowerPoint slides. However, there were also other times, where she did not use PowerPoint slides. Instead, she used mind map images to be shared with her students. She mentioned that she retrieved the mind map template online.

Eva used PowerPoint slides and Buzan mind map for her students as she believes the content that she has flipped is comprehensible by her students. By preparing her students with PowerPoint slides and mind map, the content is easier to be delivered and it looks interesting. The slides' features were comprising of multimedia elements such as text and audio. Thus, her students will be able to grasp the content on their own before the class.

For the Paraphrasing slide, it begins with the explanation and the importance of paraphrasing. Next, it presents the steps that students can use to start paraphrasing. After that, it provides a few ways or strategies that students can apply in order to paraphrase correctly. Subsequently, the slide provides with a few simple practices for the students.

For the Introductory and Concluding paragraph, the slide starts with explaining about the purpose of these two paragraphs. Next, the slide presents the relationship between these two paragraphs. After that, the slide shows ways that can be applied in order to compose a solid and good introductory and concluding paragraphs. Besides having multimedia elements in her slides such as animated wordings as well as audio, the arrangement of sentences, the wordings fonts and colours help to emphasize the key points of the content. Hence, these features are able to facilitate her students to digest the content on their own prior class.

Eva also flipped content related to grammar which are basic sentence structure, Present progressive tense and Past progressive tense. The notes present a few patterns of sentence structure and the way to arrange them. As for the Present progressive and Past progressive tense, the notes start by describing the timeline of how each tense is used. The notes also provide examples and situations in which we can find and use both of the tenses correctly. The timeline and examples allow students to comprehend each of the tenses better.

Even though Eva stated that she utilised Buzan mind map, during the observation, there are no evidence to support this. As for the slides and notes pertaining to other online learning content, she shared the slides and notes with the researcher.

The notes and slides' features are assumed to assist Eva's students due to the simple arrangement of the content. The key points are arranged in bullet form and the suitable examples are given in the slides.

These features optimize the management of the cognitive load resources by alleviating the intrinsic cognitive load which is linked with the new content. The extraneous cognitive load also reduced with the help of features of the PowerPoint slides and the notes. Simultaneously, this process promotes germane cognitive load as the features aid in magnifying important key points for students. As a result, students can understand the content independently and be prepared for the next tasks.

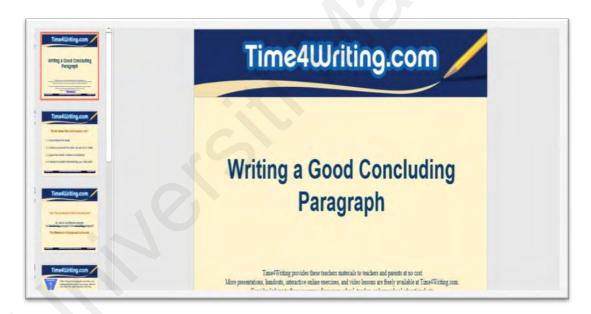


Figure 4.3 Eva's PowerPoint slides

Both Della and Eva uploaded their online learning content in advance which is usually one week prior to the lesson. Both of the participants mentioned that they need to upload the online learning content earlier since their students are expected to read, watch and be prepared with the information before class. In addition, a one-week duration is given to avoid students from giving excuses of not having time to read,

watch and comprehend the online learning content before the class. Furthermore, it is also for the students to ask or discuss in the online learning platform if they encounter any problems related the content that the lecturers shared.

#### 4.3.2 The use of interactive platform

Subsequently, the participants uploaded their online learning content to their preferred online learning platform. For online learning platform, both participants have utilised smartphone applications such as WhatsApp and Telegram to share their online learning content. They chose their preferred online learning platform due to its ability to provide interaction between the lecturers and the students. For Della's class, at first, she uploaded her online learning content on her institutions Learning Management System (LMS).

"and as for platform, I use two platforms, one is the ... one is the WhatsApp platform where I have a group with my students and the other is the e-learning platform that we have here in XX university where we're expected to upload materials on it, uh.. prior to the lesson."

(Della, Interview, 38-41)

It is a platform where lecturers can upload and share their online learning content with their students. The students also benefit from the portal as they can log in and download the online learning content. However, in this LMS, the lecturers and students could not interact with each other to discuss the online learning content. Thus, Della decided to shift her online learning platform to a more interactive platform where she and her students could interact.

As a result, Della chose to use the smartphone application as platform to share her online learning content with the students. By using this platform, she can simultaneously have discussions in real-time with her students pertaining to the online learning content that she shared. She used the dominant platform which is WhatsApp, a mobile application that is available on both Android and iOS operating systems. Besides, it is also available in the desktop version.

She also chose this platform as it is user-friendly and convenient because all of her students are familiar with it. This application provides text messaging between individuals and groups. Furthermore, it can share audio messages, files, and graphic "stickers" that prompt emotions or feelings.

Then, she created a group in that WhatsApp platform with all of her students to conveniently interact with them. She mentioned that since the students are active on the WhatsApp application all the time, thus utilizing it to share and discuss the online learning content is a good way to attract students to read or watch the online learning content that she has shared. By allowing the students to discuss and share their questions and doubts via these platforms, Della's students can avoid processing irrelevant content to foster learning. Moreover, the benefits of receiving the feedback from their lecturers in real-time will enhance their germane cognitive load and facilitate their learning.

Likewise, Eva also fully utilised the smartphone application among her students. She used WhatsApp with her students as online learning platform to share the online learning content. Apart from being commonly used among her students, she

used this platform because the institutions' LMS is still in developing process. Nevertheless, this did not hinder her from practicing Flipped Classroom.

"As for this institution, they are still in the midst of uh... establishing LMS. That doesn't hinder me to use flipped classroom because I also can use their WhatsApp and Telegram, alright."

(Eva, Interview, 38-40)

Eva cited that her current institution's LMS is still not developed yet. It is still in construction since the institution has only been in operation for almost seven years. Nonetheless, Eva is still determined to implement FC with her students as she can utilise WhatsApp and Telegram applications. These mobile applications are employed as an online learning platform where it is a place to share the online learning content as well as having discussion with her students online.

This shows that Eva is very enthusiastic and responsible in conducting her flipped lesson, since she realizes the effectiveness of implementing FC in her classroom. Therefore, she utilised her students' familiarity with the smartphone application as a mean to deliver her online learning content.

Moreover, by having the same reason as Della, Eva also created a WhatsApp group in order for her to share her online learning content with her students. At the same time, Eva and her students can also discuss and interact in the group regarding to the content that she shared. She can also provide instructions and ask her students for feedback in real-time in the WhatsApp group. As a result, her students' extraneous load will decrease and simultaneously augment their germane cognitive load that contributes directly to their learning.

In addition, Eva also used the Telegram application platform. Similar to WhatsApp application, Telegram application is also available on iOS and Android operating system. It is also available in desktop version for users to use on their laptop. Apart from that, Telegram application can also send large files with less hassle as the files are saved in cloud memory. Therefore, it is easy and convenient for Eva to share larger files with her students on the Telegram group. Furthermore, her students are highly familiar with Telegram and required no training in the functionality of the application.

Della and Eva used WhatsApp and Telegram applications to interact with their students after they posted the online learning content. On top of that, by utilizing these platforms, both lecturers can provide timely and constructive feedback to their students whenever they discuss or ask regarding the content. Moreover, these platforms also allow lecturers to observe their students' interactions in the online group as well as to check their progress in comprehending the content. However, the details on how the interaction is really conducted cannot be included in the evident in order to maintain the participants' privacy.

This strategy will help students to better allocate their cognitive loads because the lecturers' timely feedback and guidance can contribute in scaffolding the knowledge of the new learning content. Furthermore, the discussion and interaction with their peers will leave more space on students' working memory for future learning as the load in working memory is now shared with their peers. Consequently, they will gain enough knowledge to participate in the next activities in the classroom.

#### 4.3.3 A check for students' understanding of the content

During the observation, when Della entered her classroom, she always greets her students with a loud and clear voice. Her voice and behavior implied that she was looking forward and ready to start her class. Next, she straightforwardly asked her students about the topic or the content that she uploaded and shared with them online. She randomly picked any students and asked them questions. While asking them, she started drawing a mind map on the whiteboard about that topic. This can be observed based on the following excerpt:

"Good afternoon everyone. Ok, are we all ready for today's lesson? OK, good. So, randomly let me ask you questions, Ling, what's comma splice?"

(Code2, No.2)

Initially, Della greeted her students. Then, she signaled to her students indicating that she was about to start today's lesson. Next, she would randomly pick out student's name to ask them questions. She did this to identify whether her students have read or viewed the online learning content that she has uploaded online. In this excerpt, she has called out Ling's name.

By doing this, she was trying to get response from the quiet and the low proficiency students to respond to her questions. During the observation, it was noticeable that Ling was a shy and quiet student. According to Della, it is always the high proficiency students who would respond to her questions. This is also a way for her to ascertain if her students read and watched the content that she shared online prior class. Hence, she can identify whether they learnt the content before the class.

"First of all I have to come into class, and asked if they've checked out the PowerPoint slides or the videos that I've uploaded on the e-learning portal."

(Della, Interview, 9-12)

She explained that the first step she did when she entered the class was to ask her students if they studied the PowerPoint slides or the videos that she uploaded on the online learning platform, in this example it was the institution's LMS. She always asked them whether they watched or read the online learning content that she prepared.

Della did this with her students as she wanted her students to be responsible for their learning. Therefore, asking her students whether they have prepared before class emphasizes the importance of reading and viewing the online learning content prior class. It seemed that Della wanted to make sure that her students comprehended the content before she moved on to the next activity.

This is crucial to avoid any students from getting left behind. If her students did not come prepared with the content, then class activities might be executed poorly as students cannot participate. It is because their cognitive load will not be managed effectively and hinder effective learning. Furthermore, the activities in the class will impose intrinsic cognitive load as well as extraneous load to the students since they did not prepare earlier. Thus, the working memory cannot be shared with the other students as they need to use the working memory space for the new content.

Comparatively, Eva greeted her students to let them know that she was ready to start her class. Her friendly personality made her students respect her which prompted them to quickly return to their seats to get ready. Subsequently, she asked her students about the topic of the day. She recalled the lesson with the students, asked

questions or gave them questionnaire to check their understanding of the content which she shared online.

"I'll just do a very quick recap or questionnaire to see whether they've understood.

Like just now, you see I asked them what happened last week, not just last week, even the previous lesson. It's all interconnected just to see whether they understood, you know they've been keeping align with the content. Because when you talk about proficiency, it's all connected. "

(Eva, Interview, 31-34)

Eva said when she started her in class lesson, she would do a short recap or question and answer session with her students. This is to check if they comprehended the online learning content or not. She even stressed the matter out to the researcher that she did not just ask about today's lesson, but she also asked about previous week's lessons. She did this as she believes that lessons are all connected and relevant in acquiring English language proficiency.

According to her, this is done to make sure they understood and allow them to associate the current content with the previous content that they have learnt. Furthermore, she will give them cues or hints which relate to the content to prompt her students. To illustrate, in order to make it easier for them to link their lesson, she would draw a mind map and write the key words on the whiteboard. This can be seen based on the following excerpt, she was drawing a mind map of an essay framework on the whiteboard (while asking her students):

L: "Good morning, everyone. So, this month is responsibility month, so I want all of you to be responsible and have the feelings that you have to finish your diploma. Ok?

Ok, done...Did you see my WhatsApp?"

S: "Yes."

L: "On my concluding paragraph? Ok, what is a concluding paragraph? Ok, before that, before that, what is the first one? We are talking about the framework in essay yea? What do you have in the beginning?"

S: "Introduction."

L:" and then drop to..." S:" Thesis statement"

(Code 5, No.2)

Eva initiated her lesson with motivational talk because she believes this will motivate and energize her students to learn for that day. After that, she asked them whether they have seen her WhatsApp post. This is because she has uploaded her online learning content on their WhatsApp group. The students then replied "Yes", indicating that they have seen her post. She then discussed the content; in this excerpt it was the essay framework particularly the Concluding paragraph. However, it was apparent that she also included previous lessons which were the Introductory paragraph and the Thesis statement.

Eva prompted her students by asking about the topic and giving clues like she is going to talk about the Essay framework with her students. By saying this, her students realized that they need to give feedback regarding their lesson on the Concluding paragraph. On top of that, the students also managed to recall the previous lesson when she mentioned the Essay framework. As a result, her students were able to respond accordingly. This strategy manages to promote germane load and helps

students understand the content better since they currently received the feedback and guidance from their lecturer.

Eva also talked about real-life situations that were relevant to the topic and to the students as well. This can be observed when she discussed about basic sentence structure (grammar item) in the class. The activity was conducted based on the following excerpt:

L: "Imran submitted his assignments last week. So, who is the subject?"

S: "Imran".

L:" What is the verb?" S: "submitted"

L: "What is the object?" S: "assignment"

(Code 6, No.5)

In these conversation exchanges, it can be seen that Eva highlighted her student's Imran as an example for the lesson. The reason was the students were asked to submit their assignment a week before the class took place Thus, Eva taken this chance to use this real-life situation with her students, in hoping that they could comprehend the lesson easily.

Furthermore, by exposing the students to the situation, the students can illustrate and relate to the example that was presented. They can easily identify the component that they need to master in a Basic English sentence. As mentioned earlier, most of her students are low proficiency students. Thus, by doing this, her students are more interested as they are involved in the lesson.

It can be seen during the observation that the students were more involved and participative. Even, during the interview, this particular student named Imran also seemed motivated and willing to be interviewed. It can be noticed that despite his low proficiency, which makes the researcher decided to conduct the interview in Bahasa Malaysia, he was still eager to cooperate and response in English.

This scenario shows that this strategy seems to ease the intrinsic load associated with the difficulty in learning a new content for the students. By giving real-life example to her students, it will allow them to resonate and make sense of the content. This in turn will lessen extraneous load and promote germane load. Thus, the students will be able to learn effectively and consolidate the new content efficiently.

## 4.3.4 Reinforcements for student to prepare prior class

In this strategy, reinforcement is used by the participants to encourage their students to read, view and prepare themselves prior the class session. This is done to increase the students' behavior of preparing before class. It can be observed that the participants have incorporated positive and negative reinforcements. The participants used positive reinforcements when they motivate and praise the students who prepared before class. On the other hand, they also used negative reinforcements when their students did not prepare before class.

In Della's class, usually after she did her Question-and-Answer session with her students, she will also motivate her students to come to class prepared. She did this by informing them before conducting Flipped Classroom with her students. She has mentioned that her students were not familiar with Flipped Classroom, thus she hopes by informing them beforehand regarding the benefits of FC and how it is conducted will make the class goes as planned.

Apart from informing her students to read and watch the online learning content in the class, Della also encouraged her students to read and watch the online learning content by promising to increase their participation marks if they managed to respond to her question whether on the virtual WhatsApp group or in the class before she started her lesson. In addition, she has also mentioned the benefit of using Flipped Classroom to her students in order to experience an engaging English learning class.

"So, for example, I'm gonna upload this video, about five days before my class and then ask questions, "So, what do you think?", "What have you learnt from the video?". So, they have to respond, and I'll tell them that your responses are going to account for your participation's marks. So, that'll be a good source of motivation to them."

(Della, Interview, 110-114)

Della would usually upload her online learning content, in this excerpt, the video, five days prior to her class. After she posted, she would ask her students questions regarding the online learning content, whether in the virtual group or in the classroom. As a result, her students have to respond since their responses will be calculated as participation marks. By doing so, she believes that it will encourage her students to read or watch the online learning content before class.

By informing them about the online learning content and the advantages of preparing themselves before class, Della expected her students to be able to respond to her questions. However, some of them did not prepare before class. Thus, she encouraged them by drawing their attention to the participation marks in the virtual

group as well as in the class. In addition, she also "threatened" her students in order to get them to read and watch the online learning content which she has prepared and shared prior class in the online learning platform. She stated "threatening" worked well than motivating them verbally. Sometimes, she asked them to leave her class if they came unprepared.

"but I think threatening works better. So, I threaten them, "If you do not come prepared, I'm going to ask you to leave ". So, I think threatening work better for me cause the more and more I motivate them, the more they took it for granted. Finally, I started threatening them. I said, "Ok, you don't watch before you come and if I ask you questions at the beginning of the class, you can't answer then you have to leave the class". "

(Della, Interview, 52-57)

Della revealed that, at times, she needed to warn her students in order to get them to prepare before class. According to her, she "threatened" her students to leave her class, if they came unprepared. She believes this approach is more effective than motivating the students because she suspected that her students would take things lightly if she did not warn them.

During her class observation, however, Della never "threatened" them to leave the class. She only talked about how they need to watch and read the online learning content as the topic will be asked in their final examination. In other class observations, she nagged them, telling how disappointed she was when there were only a few students student can answer her questions about the topic of the day. It can be interpreted that nagging and informing them about the final examination questions did not encourage her students to read or view the online learning content prior class. This can be observed based on the following excerpt:

"You know why am I asking you comma splice? Because there are so many comma splices in your term paper!"

"Come on guys, we are not going to waste time going through each error."

(Code2, No.5)

In this lesson, Della asked her students regarding Editing skills topic. She asked her students the meaning of comma splice. Since her students could not give satisfying responses because they did not watch or read the online learning content before class, Della became upset. She then warned them by saying that the topic would be asked in their term paper. Moreover, she was also upset as she needed to reteach the topic all over again.

When Della figured out that motivating or encouraging her students did not really work with them, she tried to remind them that they need to prepare or do revision regarding the content that she has shared online. She said that she has made the content as simple and interactive as possible because the content is going to be asked in their final examination. As a result, she resorted to warn or "threaten" her students such as asking them to leave her class or to deduct their participation marks.

Nonetheless, during the class in which they did the Conditional statements lesson, majority of her students seemed to be prepared. For that lesson, Della used a YouTube video. It seemed that her students prefer to watch the video to learn rather than other content materials such as PowerPoint slides and the infographic. It is

because they were not very prepared in other classes that have used PowerPoint slide and infographic content.

This situation indicated that the video managed to make her students draw out important key points from the content. The video also strengthened her students' germane cognitive load to construct schema and automation in the long-term memory and achieve effective learning. On the other hand, Eva did not "threaten" her students. However, her first step was similar to Della where she informed her students about Flipped Classroom before she applied it to her class.

Next, she would usually inform her class about the online learning content in the classroom. She would tell them what to do with the online learning content, provided them instruction or else, they would just watch or read without needing to understand the content. Moreover, she would also pair task or practice with the content since she wanted them to understand the content thoroughly prior class. She did this with the Concluding paragraph slide, where she also prepared the practice that the students need to do before class. Nonetheless, that still depends on the content. There were also other contents which she did not prepare any tasks with the notes such as the grammar topic.

This is because she feels confident that her students will read or view the content without having to provide practices for that content. Apart from instruction in the class, sometimes she would conduct Pop quiz (sudden quiz without informing the students) in class. She would inform them in advance about conducting Pop quiz or quiz the next class and asked them to come prepared to class. Even though, a pop quiz is a short quiz which is usually conducted without giving any notices or warnings

before the quiz, Eva still informs them in advance just to make sure they read or view the online learning content.

"I will give like a Pop quiz, watch and you have to come back and do a quiz for me. So, by hook or by crook, they still have to."

(Eva, Interview, 101-102)

In order to encourage her students to read or view her online learning content that she posted online, Eva would conduct a Pop quiz in the class before her lesson. She would inform about the Pop quiz in the previous class to her students. Consequently, she hopes they would prepare because they did not want to be embarrassed or fail the quiz.

Eva did not directly motivate or "threaten" her students to prepare before class. However, once she informed to conduct a Pop quiz in her class, her students would undoubtedly prepare themselves before class. Since they did not want to be embarrassed in the class because they did not know the answers to the quiz, they would necessarily prepare and do revision with the online learning content prior class. By doing this, her students' intrinsic load will be alleviated as they feel they are prepared and ready to take on the quiz. On top of that, this strategy also encourages her students to discuss and ask their lecturer or peers if they have any difficulties in understanding the content through online platforms.

Even though Eva did motivate or "threaten" her students, she still believes that if motivation is used correctly to the students, students will definitely follow as the lecturers assign and that will benefit both lecturers and students. During Eva class'

observation, she did not nag or "threaten" her students if they came unprepared. Instead, she would just ask and advise them to come prepared for the next class.

In addition to informing, instructing and "threatening" their students in the classroom, both participants have reminded their students before the end of their classes to read or watch the online learning materials for the upcoming class. They will usually pair that reminder with the information of when and where they are going to share the content with them. Reminding the student will ease the intrinsic load as they can have ample time to comprehend the content at their own pace and time. Besides, it will also give them the chances to ask others as well as to look up for other online resources.

#### 4.3.5 Iteration of online learning content in the classroom

Despite uploading and sharing the online learning content with the students via the online learning platform, participants from both institutions have to sometimes iterate the online learning content in the classroom to their students. This resulted from students who came unprepared, did not understand or had queries regarding the content that were provided prior attending to the class.

In Della's class, through three observations, she still had to reteach and reexplain the online learning content that she has posted. As mentioned earlier, during the earlier stage in her lesson, Della has asked her students whether they have understood the content that she has prepared. Sometimes, when she was not satisfied with their responses or felt that they did not understand the important key points, she would go through the content again with them. She would emphasize and re-explain certain points that she thinks the students really need to master so that they are able to do the next task. She did this in order to give those who came unprepared to have the gist of what will they do in the class. Otherwise, the students who came unprepared will be left behind and will feel clueless when they conduct group works and discussions later on in the class. Besides, Della also employed this strategy because sometimes she was not satisfied with the students' response during the early session of her lesson. Thus, she did this in order to ensure that her students get the point right.

"like I have to reteach again because we have to remember that though you can force them one, twice but not all the time. If they're not taking any initiative, then you have to do your part. So, I have to teach the entire topic again. So, I go through the entire topic then those who have watched the video may understand it better, those who didn't watch, uh... they rely wholly on my lecture there."

(Della, Interview, 63-67)

Della still retaught and re-explained because her students still came to class unprepared. According to her, if students still came unprepared, consequently she has to execute the lecture verbally to her students in the class. Therefore, for students who prepared, the lecture will solidify their understanding. However, for those who came unprepared, they just need to depend solely on the lecture that she gave in the class which would take up around 15-20 minutes only. They would only rely on that to complete the subsequent activities.

Despite the reinforcements that she applied with her students, Della still needed to reteach or re-explain the online learning content that she uploaded prior to class. She did this to make sure that she could proceed with her plan which was to conduct

activities or discussion in the classroom. By iterating the content again in the classroom, Della can ensure that all of her students will be able to perform during the activities or the discussion that she is going to conduct later in class. However, during the observations, she did not perform this strategy in all of her lessons. She only did this in one of her classes which is during the Argumentative essay lesson.

It can be interpreted that the Argumentative essay lesson was difficult to comprehend by her students as they needed to practice the writing of the essay in order to measure whether they have understood the content.

Besides, the online learning content prepared for her students was in the form of a PowerPoint slide. Thus, the explanation of the essay was not as elaborative as the lesson with the video. This indicates that the online learning content that Della has prepared for Argumentative essay did not help to facilitate her students to alleviate the intrinsic cognitive load of that content. The PowerPoint slide also did not lessen the extraneous cognitive load in their learning process. Thus, iterating the content again in the class promoted germane cognitive load and helped the students to understand the content.

The iteration of the online learning content in Della's class will usually take up around 15-20 minutes. As a result, according to Della, those who came prepared would have better understanding of the content compared to those who did not read and watch the online learning content prior to coming class. It can be observed in her class later on that during the group work and discussion, the students who came prepared managed to complete the task faster and they could do the task on their own without asking the help from their lecturer.

In like manner, Eva also needed to iterate her online learning content in her classroom. During the first observation, most of her students did not come prepared. However, she did not straightforwardly reteach them. She asked them questions regarding the content. Besides, she even gave hints or clues about the content, such as providing them with an example or using a few key terms. Nonetheless, her students could not provide satisfactory answers which resulted Eva to reteach and re-explain the online learning content again in the class.

"But, in case if that content is not successfully understood, then I won't be able to flip much because I need to spend time to you know re-explain from scratch of the content."

(Eva, Interview, 44-46)

According to Eva, if her students could not understand the content successfully, she will spend the time to re-explain and reteach the content from the beginning. She also said that she could not conduct FC lesson fully as her lecture would take some time, thus interfere with the next in-class activities.

Eva did this by teaching them about the whole contents including demonstrating on how to do the process, giving real life examples and modeled one of the tasks and doing it together with them in the class. As a result, her students can proceed to do the planned tasks after the iteration session. As she had to reteach them from the start, this session usually lasts around 20-25 minutes. Therefore, her students who came prepared can take advantage by asking her more questions pertaining to the online learning content. On the other hand, those who came unprepared would have a gist on the lesson.

Similarly, the online learning content that Eva provided for the lesson that she needed to reteach was using the PowerPoint slide. Thus, it is believed that her students might need more explanation of the content as the slide could not help in understanding the content prior to coming to the class. Even though, Eva mentioned earlier that she carefully chose the content that was easy to be comprehended by her students, still she needed to take into consideration on how the content was presented and delivered in order to avoid repeating the same content in the class.

Nonetheless, this strategy helped her students to comprehend the content better. Even though they could not provide satisfactory response to their lecturer, having been exposed to the online learning content prior to coming to the class gave them the idea of the content. This resulted in their intrinsic load being relieved. The content then is solidified by the lecturers when they reteach and re-explain the content in the classroom. As a result, students extraneous load can be minimized and thus encourage germane load.

## 4.3.6 Arrangement of engaging in-class activities

Subsequently, after the participants have made sure that their students fully understood the online learning content, they will proceed with the planned tasks or activities in the classroom. Most of the activities which they did with the students in the classroom involved group work and in class discussions.

In Della's class, she would firstly divide her students by placing five members in a group. Interestingly, during all of the observations in her class, the students would usually would never be in the same group. She would try to juggle them in a different group in every lesson. She would always conduct collaborative work among her

students. Each of the groups then would be seated distantly from the other groups as they need to discuss and brainstorm the ideas to complete the task.

According to Della, one of the activities that was implemented in the class was writing on Wiki. This is done in their institutions LMS where it allows students to write in Wiki document with their groupmates. Wiki document can be edited collaboratively by many individuals at the same time to make the content useful, relevant and updated such as Wikipedia. This situation will allow students' cognitive load to be lessened as compared to the cognitive load experienced by students who completed the task on his/her own. While her students were doing their works, Della would walk around her class to each group, check on their works and facilitate them if they have problems. This strategy is to assign students to solve and complete the task within their groups and Della just acts as a facilitator.

"I do a lot of uh... collaborative work. I put them into groups in almost every lesson. We have also done writing on Wiki. Yea, we have done writing on Wiki. So, on the elearning platform, there's a Wiki document, where they write in groups and so on. So, in class they are expected to brainstorm, come up with points, come to the front and present of the class and provide criticism and suggestions, opinion. So, I try to engage them to a lot of group works, discussion and so on. "

(Della, Interview, 71-76)

She emphasized that most of her in-class activities were collaborative work.

She would firstly group her students in majority of her lessons. Then, she would proceed with the activities. She mentioned one of the activities that she has done in FC lesson was writing on Wiki which is embedded on the institution LMS. She has

assigned each group to write an article on Wiki. Prior to that, she asked the students to brainstorm the ideas or points pertaining to that article in their groups.

Then, the students needed to present their ideas in front of their classmates, thus the ideas can be improved. The other students were asked to give critic and comment. Next, each group would write their article online. From the observation, the students used their mobile phones to write on the Wiki in the class. They would take their turn to write, add and edit the group's article.

Della felt her students would be more involved, participative and cooperative when she conducted tasks which involved collaborative works such as discussion and group works. These activities allowed her students to participate and express their ideas among their friends. On top of that, these tasks or activities have also permitted them to ask their lecturer if they had any problems in solving the tasks.

The activities that she planned were also relevant and related to the online learning content that she uploaded online. This is important as her students prepared prior to attending the class; thus, their intrinsic load has been alleviated. The collaborative discussion also allowed each student's cognitive load to be managed efficiently because the students shared and distributed their own working memory with their peers. This will leave more space in their working memory capacity. Thus, more space can be used for group activities and to build schema in their long -term memory to solve the same problems in the future.

During other observation in Della's class, she asked her students to analyze conditional statements in a group. She gave more than 10 sentences for them to identify and recognize the conditional statements and correct the wrong sentences. As

mentioned earlier, the students who came prepared managed to complete the task earlier than those who came unprepared. Furthermore, it can be seen that the prepared students did not require as much help as students who came unprepared.

The discussion usually takes up between 30-40 minutes. Most of the time, she would extend the time for the tasks. After all of them have completed the task, she would discuss the tasks with the whole class and debrief them about the topic. In this stage, she would re-explain any inquiries that she received from her students and provided feedback on their works. According to Della, this approach can gauge her students understanding of the content.

In her class, Della tried as much as she could to facilitate her students' learning. She likes to ask her students a lot pertaining to the task. At the same time, she also attempted to evaluate her students' understanding by randomly asking them from time to time. She also loves to ask the quiet students to initiate and participate in the class activities. She believes by executing these plans, her students will be able to learn and then apply what they have learnt. This situation can promote and foster germane load which will help her students to comprehend and solve the task efficiently.

As for Eva's class, most of her classroom activities are class discussion in which she would first randomly ask any of her students to brainstorm ideas for the task. If she noticed her students could not provide satisfying answers, she would then ask and call out other students who she thought could help the troubled student. She opted for class discussion and presentation, be it individual or group since her students' numbers are very small. Nevertheless, she still managed to conduct Flipped Classroom with her students.

"In class, the number one is discussion, number two is presentation. So, it will accompany with presentation regardless whether it's an individual presentation or even group presentation. Discussion meaning can be collaborative discussion."

(Eva, Interview, 120-122)

According to Eva, she prioritized collaborative discussion and presentation in her class. The presentation that she conducted was either individual or in groups. Her activities would usually start with asking the students to discuss regarding the task, Then, she would ask the students to present their points in front of the class.

Eva would regularly pair discussion with a presentation in the class with her students. It can be observed in the class that almost every time the students have discussed on a particular content, Eva would definitely ask them to present their points in front of the class. She believes by doing this, her students are able to not only brainstorm ideas but also to confidently express the ideas in front of the class.

During the observation in her class, it can be observed that Eva managed to conduct two different contents in her class. Therefore, she managed to organize around three activities for each class. One of the activities in her class was collaborative discussions regarding the topic sentence and concluding sentence. The activities were relevant and linked to the online learning content shared on the online learning platform.

One of the activities was through assigning the students to individually write a few topic sentences on a piece of *Mahjong* paper. Next, each one of them was required to paste their work on the white board as each one of their works would be discussed.

The discussions would involve error identification, correcting the error and getting feedback from their lecturer. The objective of performing this activity was to let them know on how to create a good topic sentence as well as to avoid mistakes in creating a good topic sentence.

Apart from that task, there was also another activity during the observation where Eva gave her students job advertisements which she retrieved from many sources. She then instructed her students to analyze the advertisement based on some questions that she has prepared earlier. She gave her students to do this individually and after 15 minutes, she discussed the answer with the rest of the class.

The purpose of conducting this activity was to ensure the students to be able to analyze and apply their understanding of the lesson with authentic English materials. There was also the other task in the classroom where Eva asked earlier in the previous class for her students to look for pamphlet or flyers in the shopping malls or other retail shops. Subsequently, she asked them to analyze on how grammar was conducted in the flyers and pamphlets. They also needed to edit and rectify the pamphlet if they found any errors or mistakes in the pamphlet.

All the student's activities conducted by Eva in the classroom which she mentioned during the interview and as observed involved discussion among the groupmates. The discussion will overcome individuals working memory limitations. This is because students have used the combination of working memories during the collaborative discussion. Correspondingly, students will be able to use the ideas that they have come up during the discussion to complete their tasks. Besides, the comment

and suggestion given during their presentation will also enhance their germane cognitive load and aid their learning process.

In each of Eva's lesson, she would clearly follow the lesson' objectives for that day. Therefore, Eva feels by having a recap session with her students, it helps her to measure her students' performance on that day. Consequently, it aids her to detect whether she can proceed with a new lesson for the next class or need to strengthen the content in the future. In addition, it will also enable students to filter out any external information or extraneous load that they have encountered during the pre- lecture as well as during the discussion with their groupmates. Furthermore, apart from the recap session, the in-class activities also allow students to improve their cognitive resources in order to establish schema to be stored in their long-term memory.

### 4.4 Lecturers' and students' perceptions of Flipped Classroom

Lecturers' and students' perceptions will be discussed based on how they perceived FC towards their teaching and learning. The data is gathered from the semi-structured interview with the lecturers and students after the class session. The finding will be presented with the lecturers' perceptions following by the students' perceptions of FC.

# 4.4.1 FC enhances teaching

Both of the participants reported that Flipped Classroom enhanced not only their teaching in the classroom but also their students' learning. According to Eva, since applying Flipped Classroom, her classroom environment transformed towards student-centred learning. She has more time to work with her students in small groups or individually. Moreover, she is comfortable with her role in student- centred classroom knowing that she needs to facilitate her students more instead of only

teaching. She also mentioned that Flipped Classroom needs to be interjected properly in order to yield the benefits. Furthermore, her students would also learn and construct their knowledge through discussion during the group works activities and with little guidance from their lecturers.

"It enhances the teaching, enhances the teaching because as you know this generation, it's no longer teacher-oriented, it's more students- oriented. So, that doesn't mean, the teacher is not being prepared, the teacher is prepared, sometimes you know, you give them topics to present, that doesn't mean we don't read, we also still read, we have to know what students are actually presenting. So, it needs to be interjected correctly, it depends. "

(Eva, Interview, 149-153)

Eva said that FC enhances her teaching since her class now is more student-centred instead teacher - centred. By employing this approach, the lecturer's responsibility will be lessened as the students will have to prepare prior to coming to the class on their own. As a result, she has more time in the class to have personalized instructional time with her students. The personalized instructional time helps the students to eliminate extraneous cognitive load as they can get a clearer explanation from their lecturers.

In their classes, Della and Eva have tried as much as they could to assist and facilitate their students' learning. They would go to each group to ask their students a lot relating to the task. Simultaneously, they also tried to assess their students' understanding by randomly asking them from time to time. This could enhance their teaching as they were able to get to know their students more, and thus, they are also

able to accommodate the different styles of their students' learning. They believe by doing these, their students will be able to learn and then apply what they have learnt.

However, during the observation, it can be seen that the class has not fully transformed into student-centred classroom as sometimes the lecturers still need to reteach and re-explain the online learning content in the class. Thus, making the class more teacher-centred. It is probably because their students did not utilise the benefits of the online learning platform to get updated with the content and to interact with the lecturers and peers in their virtual group. This can be evident as they still came to class unprepared.

Apart from perceiving the class to be more student-centred which enhancing their teaching, Eva and Della also believe in the use of captivating and engaging online learning content especially the importance of creating, making, and using their videos to be shared with students before they attend the class. The videos will be used as online learning content that the lecturers shared before class. By sharing the videos that the lecturer created on their own before class, they believe that with the videos enhance their teaching. Thus, students will be able to comprehend the online learning content better.

According to Della, the videos that they created, feature the lecturer, or utilises the lecturer's voice. Therefore, the video will have the same teaching style as the lecturer in real life. It is as if the video is customized to fulfill the students' learning styles. By doing this, the online learning content will have a personal connection with their students. This is because the lecturers know their students and have a better

rapport with them. As a result, students will be more motivated and interested in watching the online learning content.

"I think that's better because you know sometimes, when you take You Tube, they are all whites, sometimes they don't understand. Like us, now, you have uh...have rapport with the student, you know your students, how they... in which level they are, so you go based on their level. So, that is... flipped classroom for that probably will be effective. So, you don't use anyone else but it's you, yourself. Your material, you provide."

(Eva, Interview, 63-67)

This shows that Eva thinks YouTube videos are not suitable and compatible with her students' proficiency. It is because most English content videos on YouTube are made and posted by native speakers ("they are all whites"). Thus, she thinks her students will have a hard time comprehending the content due to the accent as well as the cultural context of the native speakers ("sometimes they don't understand"). These will increase the unnecessary or irrelevant cognitive load (extraneous) to her students. As a result, she has opted to do her own videos because of her proximity with her students and aware of their proficiency level.

This is because the video will accommodate students' need because the lecturers will have the advantage of knowing their students learning challenges. At the same time, the video will allow the lecturer to maintain their teaching style and use their voice with their students. These criteria are expected to strengthen her students' learning (germane cognitive load) and aids in learning. Nonetheless, for the current institution and current class, Eva has not yet created and used her own videos as the facilities are still not available in her current institution. However, she really hopes to

create and use her own video for her future FC lesson. Likewise, Della also feels the significance in creating her own videos for FC lesson.

"if you could come up with your own videos. Like how social influencers, Youtubers, they come up with their own videos, so you basically telling your students, you're teaching them via video. So, I think they will find a personal connection when it's their own lecturer doing it, they want to watch, they, it will at least help to boost their motivation and interest in that particular method and subject."

(Della, Interview, 163-168)

Della feels that lecturers need to create their own videos (like most social influencers or YouTubers have nowadays) in order to have a personal connection with their students in that video. The students would be excited and anticipated to view the videos as it is their own lecturers who are in the videos, making it more interesting and comprehensible to watch. As a result, they would not shy away from asking and participating in the online discussion that they have in the online learning platform. This is because their intrinsic load is alleviated, thus making them comfortable to ask and discuss.

Having mentioned this, both Eva and Della did not underestimate the importance of other types of online learning content that mentioned earlier such as PowerPoint slide and infographic content. However, they believe video will be more appealing to their students due to its attractiveness and comprehensible delivery. On top of that, as evident in Della's class, most of her students were prepared prior to coming to the class when she presented You Tube video as online learning content.

Thus, she believes that creating her own video will attract her students' attention more. Although, these lecturers emphasized the importance of creating their own videos, still in this study, there was no evidence that they created and used their videos in their current institutions. They mentioned a few obstacles in constructing the videos, which will be discussed in the challenges section. However, Eva cited that in her previous institution, she had the experience of recording her own videos. Thus, that was why she mentioned the video that the lecturer created or recorded can enhance their teaching.

Other than that, Eva added, FC enhances her teaching because she believes that she can diversify her pedagogical skills to enrich students' engagement during the learning process. Since students have different learning styles, Eva thought she must also diversify the delivery of the content. The different styles are facilitated with the time given to the students to comprehend the online learning content at their own pace. They can pause and continue to learn the content whenever they want. Furthermore, their different styles in learning are also accommodated with the personalized time they obtain with the lecturer in the physical class.

"It is, I wouldn't say it is a totally an approach to be used, it can be just one part of the approaches to use, to just make teaching method different for students. It is not all the time, you know the same thing, you come to class lecture. There must be a variation in teaching and learning. Only then they will start enjoying themselves in teaching and learning. We talk about learning is very subjective. So, what will they learn, we have variety, they are exposed with so many things because we have to understand students come from different learning styles, some they don't like to come to class and sit down on their chairs. Some prefer to do something online, many people are very gadgetty,

very uh... internet savvy, so they want to do something there, sometimes even I don't know, they know much better, so I can just like, just spark a little bit and they will do more. So that actually leads to learning. "

(Eva, Interview, 135-144)

In addition, Eva mentioned that lecturers should not depend solely on FC as a teaching strategy. Eva believes that even though FC enhances her teaching, she still thinks that lecturers should not neglect other teaching approaches or strategies. She used FC as one of a few strategies or methods to make students experience a different learning environment. Since she experienced traditional teaching as well as FC, she thinks that the combination of FC with other teaching approaches and strategies will allow students to improve on their learning due to students' different learning styles.

Moreover, according to her by combining different teaching approaches, her students will start enjoying themselves in the learning process. However, her student named Imran, preferred FC because he found it fun.

I: Ok, which one do you prefer? You prefer the lecturer to just lecture or you prefer this method?

*IM: This method because uh...it...uh...fun and not, not so boring.* 

(Imran, Interview, 52-53)

Imran stated that he preferred FC to traditional class as he said his class experience was fun. From the observation of his class, Imran is a low proficiency student. However, he was enthusiastic to answer and respond whenever the lecturer asked or prompted him with questions. He also mentioned that in his secondary school,

he did not experience this teaching strategy. The teaching is one-sided and he could not express his ideas, opinion and thoughts as much as he could with FC.

Therefore, he prefers FC because it is enjoyable in which he has the opportunity to be more involved and engaged during the lesson. Besides, applying FC prompted him to be prepared before the class starts thus, helping him to be more participative in class. The students stated that this model did not burden them. Even though they had to read or watch the online learning content prior to coming to the class, they found that the online learning content definitely assisted them during the in-class activities.

## 4.4.2 FC enhances learning

Della also reported that FC facilitated in solidifying her students understanding of the learning content and consolidating the information. The students were able to experience this model since they can revisit the online learning content as many times as they want and wherever they want. Furthermore, they could also repeat the online learning content at their own pace. All the online learning content will be safely kept online, thus if there is ever, the need to clarify or refer to the online learning content, they can easily access to these notes quickly. It is also flexible for students since they can manage their time wisely knowing the notes are always available online.

"It helps to solidify learning, like they can go back to the videos any time after the lesson, if they did not capture whatever I was trying to say in the class, so that is pretty advantages."

(Della, Interview, 144-146)

Della believes that whenever her students want to revise or refer to the content, they can simply re-watch or re-read the online learning content that their lecturer uploaded. This is especially beneficial whenever they are about to sit for an examination. They do not need to keep on asking their lecturers instead, they can just flip back to content online. Besides, this could solidify their learning as they will be able to relate and connect the knowledge in the future by referring to the online learning content that they downloaded on their smartphones.

Eva also added, since she is handling students who are living in this Digital Technology Age, it is important to her to utilise the technology for the benefit of herself and her students. According to Eva, the sharing, updating and downloading information from the lecturers are effortless since students are frequently connected to the Internet via smartphones, laptops or tablets.

On top of that, students can also exchange informative knowledge among them as well as with their lecturers. This scenario occurred in the online learning platforms which were on WhatsApp and Telegram applications. Whenever Eva posted or shared the content online, she would ask her students to respond to the content online. However, the researcher has no authority to observe this scenario as the lecturers want to maintain their privacy of the interaction.

During the interview, the students also stated that the time spent to comprehend the online learning content before class was adequate for them to understand the content. They also agreed that spending time reading and watching the online learning content, helped them to understand and prepare for the upcoming class. Furthermore, the online learning content also helped them in order to obtain the information in the class.

I: Umm... Now, having watching the video, did it help you to learn in class? S: Definitely, help me to, to take in more knowledge that teacher taught us.

(Shawn, Interview, 30-31)

In this excerpt, Shawn mentioned that the online learning content that his lecturer has prepared, which was the video, assisted him in understanding more knowledge regarding the content. This shows that Shawn read and watched the online learning content before class and thus by preparing himself earlier, he managed to get more understanding of the information during the class session. He also used the opportunity in the class to ask his lecturer regarding the task that he needed to complete.

When his lecturer explained and gave feedback to his groups, he and his friends managed to take in the information easily as they experienced the problems themselves. It was apparent in the class that Shawn and his friend, Victor who would always answer their lecturer's questions. Sometimes, Della also asked them to guide other students during the discussion. Likewise, a student named Ammar (Eva's student) also experienced the same thing as Shawn.

*I: Did the notes help you to prepare for the lesson? A: Um, yes.* 

I: Can you please tell me your experience in class? How's it? A: In term of?

*I:* In terms of having reading the notes, so how's it in the class?

A: It's easier to understand when she explained it in detail, you already have the brief idea of what she's going to talk about and say and doing in class. So, it's better in term of preparation.

(Ammar, Interview, 29-35)

Ammar stated that the notes aided him to prepare before class. Moreover, during the lesson, he was able to understand better as his lecturer explained the content again. This suggests that Ammar has the advantage of understanding the content easier since he has the gist of the lesson. On top of that, he also knew what to expect and to do with the tasks provided by the lecturer.

This implies that the cognitive load is managed better as the student has more space resources in working memory. The online learning content alleviated the extraneous cognitive load which allows student to focus on the key important point of the content. As a result, this also leads to the scheme construction and automation in the student's long-term memory. It can also be seen during observation, that Ammar was an active student who would respond to the lecturer's questions. Furthermore, he would also volunteer himself to be the first person to present and do any activities in the class.

This also aligned with the responses from other students such as Leela, Alice and Victor. They mentioned that the online learning content prepared by their lecturer helped them to prepare for the class. They also mentioned that they watched and read the content using the smartphones at the comfort of their homes, the library even before the classroom started just to recall the information. Nonetheless, during the observations, it can be observed that some students still did not watch or read the content prior to coming to the class. Thus, FC did not help them to solidify some of students' learning.

Other than perceiving FC to solidify their students learning through the effectiveness of online learning content prior to attending to the class, Eva stated that

FC also enhances her students learning as they were able to enjoy the engaging activities in the class. This is because since some students are prepared with the information before class, they were ready to get involved with the activities in the class. They were also more engaged and asked more questions since they know and aware of what is going on in the class. This can be evident as the students also responded that FC helped them to understand the content better.

I: Do you like the group activities that the lecturer... S: Yea, it definitely helped out a lot.

*I: Ok, why do you like it?* 

S: Why I like it? Because we have each and individual answer, so it really helps me out to get more perspective on how should I answer the question.

(Shawn, Interview, 35-39)

In this excerpt, Shawn enjoyed the group activities or the collaborative discussions that the lecturer has prepared. He also added that by doing these activities, he managed to get different ways to answer and complete tasks from his friends. This shows that Shawn liked this experience as he could obtain a lot of different answers and perspectives from the tasks that he did together with his groupmates.

Furthermore, for the prepared students, the class activities were related and relevant to the online learning content. This is vital as students will be able to link and make relevant of what they have comprehended prior to attending the class. This is because students can optimize the allocation of the cognitive resources and the working memory is also distributed well among peers. As a result, they were able to connect the information thus, producing answers and fruitful discussion with their friends. They could also apply and practice the information for future tasks.

*I* : Does the activity relevant or related to the topic that your lecturer has given?

F: Oh, yea. The activity relate to my study and my task and I like the way she use.

(Firman, Interview, 37-38)

Another student in Eva's class, named Firman asserted that the tasks and activities conducted by the lecturer were related and relevant with the online learning content that the lecturer has shared online. He also mentioned that he liked that the lecturer shared the notes through WhatsApp and conducted activities that linked with the notes that he has read before class. During the observation, Firman was very participative even though he is struggling to speak English. As for Natasha, she liked FC as she found it to be helpful to strengthen her understanding of the content.

I: Do you find the time spent in the class helpful to understand the concept of the topic?

N: Yes, because sometimes if we read the notes, we don't really understand it fully, so if we attend the class, and then we will understand more.

(Natasha, Interview, 44-46)

Natasha mentioned that if she could not fully grasp or understand the key points of the online learning content, she would make use of the time she had in class to make sense of all the information that she has digested. She also added that she feels comfortable to learn in the class since she knows what to expect from the in-class activities. This shows that her cognitive resources have been managed effectively, thus her working memory will be ready to a new task in the class.

Natasha used the class opportunity to ask her lecturer if she did not understand the content that she read prior to attending to the class. This also indicates that her

learning will be solidified in the class as her lecturer explained more about what she could not understand earlier. She found this very helpful in improving her learning.

Apart from that, the students' learning is enhanced with the increase of interaction in Della's and Eva's classes. In their traditional classes, Della and Eva would always be the only ones talking. However, in a Flipped Classroom, Della noticed her students managed to engage and involve more in the discussion. They would ask and express their opinions with or without being prompted. Students get the opportunity to have a personalized session with their lecturers which they might not get in a traditional classroom. As a result, it increases the chances of a student performing well due to the time their instructors allocated for them. Moreover, the group work encourages the students to interact with each of their group members.

"And second, it uh... provides more interaction opportunity in the class, rather than being just... um... one-sided, where I'm just lecturing and they're listening. So, it promotes a two-way engaging, students are more interact. So, it makes learning more fun because your classroom wouldn't be so boring, so rigid and you can do so many other activities when you save time on teaching. Yea, it actually that is, that is the reason why we want to flip."

(Della, Interview, 146-150)

This shows that the interaction between Della and her students improved since she implemented FC. This is because by implementing FC, it allows Della to have more time to ask her students at the same responding to her students' queries regarding the tasks and activities in the class. The students are also more participative and responsive as they get to experience the content on their own. Previously, the class would be one-sided in which she was the one who will do the teaching and explanation.

This somehow hinders the students from asking and responding since they are still unclear of what to ask and respond. However, her student responded that, they still prefer Della to explain in the class.

I: Umm, ok which one do you prefer, to watch the video before class or you prefer Ms.

D to umm explain everything in class?

S: Uhh..I prefer to explain I prefer Ms. D to explain. I: Oh ok. So you don't like the video?

S: The video is good but it's not that effective. I: as the teaching?

S: Yea, as teaching.

(Shawn, Interview, 51-57)

In this excerpt, Shawn mentioned that he prefers his lecturer to teach in the class. This is because he thinks watching the video prior class is not as effective as his lecturer's explanation. Therefore, he prefers to listen to his lecturer to conduct the lecture than watching the video.

Shawn revealed that even though he enjoyed and liked FC because of the group works and the class activities, he still believed that his lecturer needed to explain in class. He said that he prefers his lecturer to explain in the class more than reading or watching the online learning content prior to coming to the class. Even though earlier in the interview he said the online learning content helped him to prepare for the lesson, he still prefers his lecturer to do the teaching. It can be interpreted that he is so used to listen to his lecturer explanation and thinks the lecturer explanation works better than the video.

Considering that matter, this is the factor that leads, his lecturer, Della to create or make her own video which will display herself teaching or using her voice to ensure FC is more effective in delivering the content before class. Besides, if Della created her own video, her students will be very familiar with the delivery and comfortable with the teaching in the classroom.

# 4.5 Challenges faced by lecturers and students in FC

The challenges faced by the lecturers and students will be divided into three parts which are operational challenges, faculty challenges and student-related challenges. This data is collected by conducting the semi-structured interviews with the lecturers and students.

## 4.5.1 Operational challenges

Operational challenges are challenges that are faced by the lecturers and the students when they are operating FC. They faced these challenges when they were conducting out of class as well as in-class learning. Most of the challenges or difficulties faced by lecturers and students in operational challenges include the use of technology and IT skills. Della stated in her interview that in implementing FC, she faced a few operational challenges. Among them was lack of IT facility that involves the online learning platform or LMS that is provided by the institution.

The LMS or the online learning platform only enables the lecturers to upload online learning content and for students to download online learning content. The LMS does not have a feature where the lecturers and students can interact with each other. Therefore, her students could not ask her and give feedback when she wanted to check

whether they read or viewed her online learning content. Consequently, the students could not manage their cognitive load well which would interrupt the learning process.

As a result, Della had to opt for other alternatives to share notes and simultaneously interacted with her students in real time. She wanted to make sure that her students really understand the online learning content and comprehend the information before the physical class. Besides, in the current LMS, she could not add or edit any errors or mistakes that cannot be avoided after she shared or uploaded the online learning content.

"but I'm not too happy with the platform that we have. We are using our e-learning platform, is a learning management system that is provided by the university and we have to use the e-learning platform but they're... it's not very user-friendly. Students don't really get to chat or communicate on that platform."

(Della, Interview, 97-100)

Della expressed her disappointment with her current institution LMS. This is because she said it was not user-friendly and she could not interact with her students online even though the institution asked her to utilise the LMS. As a result, she used a smartphone application like WhatsApp to share her learning content and interact with her students. The challenge that she faced was that the institution LMS did not allow her students to interact among themselves and with her. Thus, it is difficult for her to deliver her instruction simultaneously to check whether they students manage to access the learning content.

Similarly, Eva also having difficulties with the LMS in her institutions as it is still under construction. However, that did not stop Eva from looking for other ways

to conduct FC. She utilised the smartphone application in order to get the information across to her students. She used WhatsApp and Telegram application to share the online learning content and to interact with her students.

"they are still in the midst of uh... establishing LMS"

(Eva, Interview, 38)

The institution that Eva is working in has been operated for more than three years. However, due to a few obstacles, the institution is still working on its LMS since they know the benefits of developing that platform for their students' learning. As a result, Eva has to be creative in order to implement FC with her students. Thus, she used smartphone applications such as WhatsApp and Telegram to deliver online learning content to her students.

Apart from that, Della also lacked IT and Multimedia skills in this case making her own videos. She has mentioned that even though her institution requires her to create her own videos and engage in other interactive mediums, she is still not good at making her own videos. As a result, she has to find other videos from other sources such as You Tube and other educational websites to replace her own videos. However, the videos from the other sources are lengthy and dull. Sometimes, the videos are not suitable for her students' context and level of proficiency. Some of the examples given in the video are not even appropriate and suitable for Malaysian culture.

"I'm not that good in preparing videos, I've tried exploring because we're doing MOOCs here. So, we have to come up with our own videos and there are so many interactive things you can do to uh... make them wanna watch your video."

(Della, Interview, 134-136)

Even though Della acknowledged the importance of creating her own videos, she admitted that she does not have the expertise in Multimedia fields, thus making her unable to create and design her own fascinating video. She also mentioned that even though the institution encourages the lecturers to practice online learning, she still does not acquire the skills to perform the task effectively. As a result, she still looks for learning content from other sources such as YouTube and other educational websites. It can be implied that in conducting FC, lecturers do not only need to know what content to be flipped and activities to be conducted in the class, but they also need to enhance their skills in order to create and design a comprehensible video.

On top of that, in operational challenges, Eva reported that it was hard for her to monitor her students to watch or read the online learning content that she prepared. She mentioned that whenever she did a forum with her students online, she could not know if her students genuinely answered based on their own answer or their friends' answer. Besides, her students are also prone to plagiarize from other online sources. This activity was difficult to be monitored and controlled by Eva, thus she found this activity as very challenging.

"Secondly, there are also possible, possibility where you know especially when you know forum, they just copy friends and have seen their friends' answer and they just, that part is a little challenging to monitor "la". Whether it's genuinely their feedback or you know."

(Eva, Interview, 156-159)

Eva thinks that her students might copy and plagiarize the answers and responses from their friends or from other sources during the online forum. She could not distinguish whether the students provide the answers and responses based on their

understanding of the content or simply copy from other friends or sources. Thus, she found that this challenge was hard to observe her students as she could not simply accuse them of copying and plagiarizing. She is still looking for a solution regarding this matter. She hopes there will be a software or a website such as Turnitin to help her out with this problem.

In addition, Eva also added that the challenge that her students faced when conducting FC was the internet connection. She said that the internet connection would be the first problem for the students as they could not have stable internet access to download the online learning materials. She also mentioned that not all students faced this problem as it depends on the area, they are staying in.

Nonetheless, none of her students has stated this issue during the interview. Her students did not even mention that Internet connection was one of the challenges they faced in applying FC. It is possible that her students merely highlighted the Internet connection problem as an excuse to Eva. This is because they wanted to avoid from being scolded or embarrassed in the classroom because they were not prepared.

## 4.5.2 Faculty challenges

Faculty challenges are the challenges that are faced by the lecturers before and when they were conducting FC which related to out of class as well as in-class learning. Most of the challenges or difficulties faced by lecturers in faculty involved the unsuitability of the content to be flipped and the increased workload for the lecturers.

Both Eva and Della that agreed that FC is not suitable to be applied for all English content. Both mentioned that they need to know which lesson they can and

need to flip since they stated not all English lesson can be flipped. Eva said the content chosen was based on the complexity of the content as well as the students' level of proficiency.

"It depends on the lesson. But if it's too technical, flipped, I don't think so it's uh...relevant. Because technical, they need a lot of understanding and hands – on work. But if like reading, then probably could be, flipped could be effective."

(Eva, Interview, 50-52)

In this excerpt, Eva stated that she chose the content in FC based on lesson requirement. If the content requires higher-order thinking skills, then she will not flip the content. This is because she thinks students will need guidance in understanding the content. However, if the content only requires lower-order thinking skills then she believes the implementation of FC is effective. This implied that FC was not effective for higher-order thinking skills activities in Eva's class.

Eva believes that not all English content can be flipped. She mentioned that lecturers should know which content to be flipped according to their students' level of proficiency. This is because she feels that if the content needs more explanation and method to be demonstrated, thus she will not flip her lesson for that content. She will conduct a conventional classroom instead.

Apart from that, according to the lecturers, FC also increased their workloads. Della reported that during her traditional class, she would just come in and teach her class. However, since implementing FC, she has to do a lot of preparations before coming to class such as preparing the online learning content, choosing videos and preparing questions to engage them in class.

"It increases the burden, because before this when I was using the normal method, I just came in the class and I teach them. Now, before the class, I have to prepare the materials, I have to find a suitable video, I have to prepare questions to engage them or to ask them, to prompt them and so yea and actually there's more, I'm still coming to class and re-teach them. So, it makes it very, very redundant. "

(Della, Interview, 119-123)

In this excerpt, Della stated that she did more work since she decided to implement FC compared to when she was conducting a traditional class. Considering that she must look for suitable videos a week before the lesson and to prepare questions that will engage the students in class, Della feels FC increased her workload as a lecturer. She also needed to think of activities that are relevant and related to online learning content.

Furthermore, after all that hard work, later on in the classroom she also sometimes needed to reteach or re-explain the content if her students came unprepared. Therefore, she felt like it was redundant and thus increasing her workload. Other than that, she mentioned that, if she could not find a suitable video, it will be difficult for her since creating and making her own video is time- consuming.

"but I did not really get videos, of course I don't have time to record my own video because it takes a lot of execution planning and so on."

(Della, Interview, 27-28)

In this excerpt, Della mentioned that she did not really use videos that she created on her own as the online learning content. This is because she did not have

time to record her own videos. Moreover, creating a single video will take a lot of execution, planning and other related works.

It can be interpreted that FC increases her burden as she needs to create her own videos if she could not find suitable videos from YouTube or other sources. As she mentioned earlier that she is not skillful in creating her own videos, this in turn will lead to more workloads as she needs to learn how to do it. This involves spending time and money on a course on creating videos or spending money in hiring someone to create the video.

# 4.5.3 Student-related challenges

Student-related challenges are the challenges that involve and relate with the students. They faced these challenges when they were conducting the lesson in the class. The challenges or difficulties faced by lecturers and students in student-related challenges include the students' unfamiliarity with FC and the non- participative students.

Della said that her students faced difficulties during the first time implementing FC due to their unfamiliarity with FC. According to her, Malaysian students were so used to being spoon-fed by their teachers in schools, thus it is a bit difficult for them to attempt this strategy. This happened with her students when she first asked them to watch and read the online learning content before class. As a result, sometimes that was the reason they came unprepared.

"I think they find it difficult to uh... it's not in the culture to come prepared in Malaysian classroom. They expect you to spoon feed them in the classroom. So, it's not really ... um... as what I expected them to be more independent, they're in college

now and so on. But the transition from high school to college hasn't been a smooth one yet."

(Della, Interview, 45-48)

Della stated that students might face hardship in adapting FC lesson. This is due to the fact they have never experienced FC in their secondary schools. Most of their experiences in the schools were just waiting for their teachers to lecture and teach in the classrooms. One of the students also mentioned that he has never experienced this teaching in school, and he prefers the class experience that he has encountered now.

This suggests that since the students never been exposed to FC during their school days, thus it is difficult for them to adapt to the new "culture" instantaneously. Adding up to that, the students also need to adapt to the transition from school to college. Thus, the students need to take some time to adhere to FC rules. As a result, Della has felt that she really needs to reteach and re-explain to her students in the class, even though she already shared the online learning content with the students' prior to coming to the class.

Eva also added that with her students, she needed to guide them regarding the online learning content. She would remind them at the end of every class to watch or read the online learning content. Besides, she would sometimes give them a task to be paired with the online learning content in order to make sure they can correctly comprehend the online learning content that she has prepared.

"I feel, flipped is still very subjective, unless like uh...I've given an input here, something in advance I give them to read or do at home, then probably, they can catch.

But something new I'm providing notes in advance, something online, they come back, it's very, very subjective. Even my previous place, where we've done flipped are not all the time is successful."

(Eva, Interview, 46-50)

In this excerpt, Eva indicated there is no fixed way to conduct FC. However, in her class, with her students, she asked and given them notes to read or any tasks to do prior to attending to the class, to ensure all of her students might be able to prepare before class and comprehend the content. Nonetheless, if she provided the content online, some of her students would not prepare and understand the content. She also addressed this situation which she had with her former students from previous institution.

This shown that even though Eva has experienced in implementing FC for a few years, yet, she still could not find ways to make her students watch or read the online learning content prior to attending the class. She could feel that if she did not do that, her students would not independently be prepared and comprehend the content that she shared online prior to coming to the class.

Apart from the lecturers, some students also faced challenges in experiencing FC. One of the students, Shawn mentioned that he was having difficulty in the classroom during the group work session. He reported that some of his group members did not contribute and engaged in the discussion as they were not prepared. Consequently, their group has to take some time in completing the task given by their lecturer.

I: Ok, so anything that you don't like?

S: Anything that I don't like, only part is..uh..some students which are not participative.

(Shawn, Interview, 49-50)

In this excerpt, when asked whether he has anything unfavorable pertaining to this model, Shawn stated that he did not like it if his groupmates were not helping out or participating in the group discussions. Shawn was upset when he noticed his groupmates were unprepared while he did prepare before attending the class. Moreover, his friends could not also catch up with the group activities as they have limited knowledge and information about what they needed to do with the task and activities instructed in the class.

Therefore, Shawn found this situation a challenge for him as he wanted the task and class activities to be done smoothly and effectively. It was evident during the observation that Shawn and his groupmates had a serious discussion to decide on how to complete the task. His group also took longer time to complete the task than the other groups.

## 4.6 Conclusion

This chapter presented the findings of this study. It was done by categorizing the findings into themes which were based on the research questions. It began by presenting the information about the participants. The strategies used by the lecturers in implementing FC is presented after that. The explanation of the strategies was based on two FC components which were out of the class and in-class lesson. Next, the chapter continued to explain the second research question which was the lecturers' and students' perceptions of FC. Subsequently, the chapter discussed the third research

question which was the challenges faced by the lecturers and the students when implementing this model.

#### **CHAPTER 5**

#### DISCUSSION AND CONCLUSION

#### 5.1 Introduction

This chapter discusses the summary of this study's purposes and methodology. It also discusses about the findings of the study and the conclusion. Firstly, it is organized by presenting the summary of this study. This is followed by the interpretation of the discussion of the findings. Subsequently, it further elaborates the implications and recommendations. Finally, a summary is presented to conclude the chapter.

## 5.2 Summary of the Study

The study investigated the FC (Flipped Classroom Model) strategies used by the tertiary institutions' lecturers in their ESL classrooms. The purpose of the study was to understand the strategies that were being practiced in the classroom and what did the lecturer prepare for students' learning prior to the online class. Besides, this study also explored the lecturers' and students' perceptions of FC and the challenges that they faced in implementing this model. In addition, the Cognitive Load theory was used to guide and navigate this study as this theory explained how learners acquired and preserved the latest information.

This study employed a qualitative method in order to investigate the lecturers' strategies in the classroom. On top of that, due to the purpose of the study to explore the lecturers' and students' perception and the challenges faced in implementing FC, it was justifiable to use a qualitative method for its data collection. As described by Creswell (2013), this method is significant when an issue needs to be explored. In

addition, Caicco (2016) stated that the qualitative method is ideal when a complex and a comprehensive understanding is needed in the study.

In this case, in order to investigate the virtual and physical strategies used by the university lecturers, a thorough report on the strategies needs to be described. Furthermore, this method was used in favor of obtaining the understanding of how students and lecturers involved and perceived the pedagogical strategy.

The required information about FC was explored before the researcher started the investigation. The researcher observed the classrooms as one of the instruments to collect the data. Next, the participants in the observations were interviewed. Both of the observation and interviews were audio-recorded after getting their consent. Subsequently, after compilation, the data was analyzed, then the findings were presented and discussed to answer the research questions.

Based on the findings, the participants practiced strategies that were utilised in their classrooms. The strategies involved the preparation before the online class, the use of interactive platforms, a check for students' understanding, reinforcement for students to prepare, iteration of online learning content and arrangement of activities in the classrooms. As for the lecturers' perceptions of FC, they stated that FC enhanced teaching and learning. In addition, the students also said that FC is convenient, increasing their motivation and enjoyment in the learning. Next, based on the findings, the challenges that the lecturers and the students encountered were operational challenges, faculty challenges and student- related challenges.

#### 5.3 Discussion and Conclusion

The discussion and conclusion of the findings of the study are discussed within the context of the research questions and available FC literature. This is done in order to justify and corroborate the explanation for the lecturers' practices in the class, the perceptions of the lecturers and students of FC as well as the challenges that were faced by the lecturers and students.

# 5.3.1 Strategies used in the Flipped Classroom Model

This section aims to provide the discussion and conclusion for the first research question which is to investigate the FC strategies used by the lecturers in selected tertiary institutions. The findings were gathered from out of the classroom and inclassroom strategies that the lecturers applied during the observation and the semi-structured interviews with the lecturers. The strategies found were preparation of online learning content, the use of interactive platform, a check for students' understanding of the online learning content, reinforcements for students to prepare prior to attending the class, iteration of online learning content in the classroom and arrangement of engaging in-class activities.

Hamdan et al. (2013) have lined up four pillars of flipped classroom: F for flexible environment, L for learning culture, I for intentional content and P for professional educators (FLIP). Then, Chen, Wang, Kinshuk and Chen (2014) have proposed revised pillars for FC for higher education: F for flexible environments, L for learning culture, I for intentional content, P for professional educators, P for progressive networking activities, E for engaging and effective experiences, and D for diversified and seamless platforms (FLIPPED).

These are the pillars that the researchers have recommended to be implemented in the FC lesson. Besides the pillars, others such as Brame (2013), Miller (2012), Kvashnina and Martynko (2016) and Hall and DuFrene (2016) have also outlined some of the best practices to be applied in the FC lesson. The pillars and the practices that these researchers recommended can serve as guidelines for other instructors who are interested in implementing FC lesson.

Based on the findings, the lecturers would prepare for the online learning content. This is coherent with one of the pillars that have been laid out by Hamdan et al. (2013) which is intentional content. The online learning content is the content prepared by the lecturers for their students before their physical class begins. The content prepared is intended specifically for the students, thus they can individually read or view the learning content prior to class at their own pace. This content is uploaded via online learning platform.

One important process prior to that is the lecturers need to choose what and which content to be flipped. Moreover, Basal (2015) stated that the effectiveness of FC is determined by the teacher who plays the role of conducting it. The teacher's task is more than just knowing the relevant theories but also selecting the appropriate and engaging activities for classroom time that are connected with the online learning content. In addition, the online learning content that the participants prepared must be suitable and relevant for their students to perform self-paced learning.

According to the participants, choosing Flipped Classroom content is very vital for lecturers because they need to plan and provide suitable content and tailor it to the students' need and diversity. Both lecturers stated that they did not choose all content

of their subject to be flipped. At first, Della mentioned that she randomly chose the content, but that contradicted her following statement, which stated she has concerns in choosing the content. According to her, if her students needed more guidance on a particular content and she felt by showing a video might help her students to understand, she would flip the content as and when required.

Likewise, Eva also mentioned that she flipped a few lessons and not all course content. According to her, the criteria that she used to choose the content were the content's complexity level and her students' proficiency level. She will not use FC, if the content needs a lot of explanation. This is in line with Mohamed Amin and Ebrahim (2014) who mentioned that in the application of FC, lecturers should assemble quality learning resources which are specific to the course requirements after setting the purposes.

The participants opted the content to be flipped carefully because they needed to gather the content from different sources and it must be relevant and specific to the learning objectives. This is also aligned with Miller (2012), who stated that instructors need to provide content that is not only relevant to the subject requirement but also accommodate the students' needs. On top of that, the participants also chose the content selectively in order to ensure the content is comprehensive for the students and simultaneously understandable by them since the students have to learn the content on their own. As a result, students are able to grasp the content at their own pace and get ready for class activities and tasks.

As for types of online content, both lecturers employed PowerPoint slides, Pinterest infographic, Mind map and documents to present and deliver their online learning content. However, Della also said she mainly used videos she retrieved from YouTube which was relevant to her content. They uploaded their online learning content in advance which was usually one week prior to the lesson. This is consistent with the other FC literature that instructors have used multiple and different multimedia to deliver the content. For example, according to Caicco (2016), the instructors used PowerPoint videos and screen capture videos. Other researchers in different fields often used some of the 2600 videos from Khan Academy as resources for the purpose of their online learning content (Houston & Lin, 2012).

The participants used various types of online content such as PowerPoint slides, Pinterest infographic, Buzan mind map and You Tube videos as a result of assembling quality learning resources for the students. According to Brame (2013), the types of online learning content can vary from simple textbook readings, videos, podcast or even screencast. It might be because the content they that chose can make the students comprehend the content better and perhaps due to its attractiveness, which in turn increases the students' engagement. Subsequently, students will gain the content primary exposure, learn better, and even remember the content prior to coming to the class.

Next, the lecturers will upload their online learning content to their preferred online learning platform. For the online learning platform, both lecturers utilised the smartphone application to share their online learning content. They have chosen their preferred online learning platform due to its ability to provide interaction between the lecturers and the students among other reasons.

For Della's class, at first, she uploaded her online learning content on her institutions Learning Management System (LMS) which is XX E-Learning portal and WhatsApp application. She also selected WhatsApp application as the platform because it is comfortable, convenient and all of her students used and familiar with it. Likewise, Eva also fully utilised WhatsApp application with her students as online learning platform to share the online learning content.

Apart from it is commonly used among her students, Eva used this platform because the institutions' LMS is still in construction. In addition, Eva also applied Telegram application platform. Similarly, to other studies that have used FC in their teaching, the instructors used different interactive platforms to deliver their online learning content such as Hung (2014) has used Webquest from Google sites for the structured FC group and TED-ed sites for the semi- structured FC. In addition, Hsieh et al. (2016) also employed LINE application platform in their studies to deliver online learning content.

Della and Eva used these platforms because they might provide an appealing and realistic English learning environment to the students. Moreover, students can have real-time interaction and timely as well as getting constructive feedback from their lecturers. At the same time, students can improve their writing and speaking skills. Due to the students' responses on the platforms, their writing and speaking skills could be improved. As a result, students are more motivated and engaged in learning.

The participants stated that by having the students watching and reading the online learning content prior to the class, students would be able to digest the content and be prepared for dynamics tasks in the class. Students could digest the content better

due to their ability to pause, rewind, fast forward or even replay the content at their own pace. This is in accordance with Miller (2012) who said instructors need to take advantage of technology to support FC and to teach in a more personalized fashion.

One of the participants also mentioned the importance of applying an interactive platform online as students could ask and discuss the content in the platform. Zhai et al. (2017) and Mason et al. (2013) also emphasized the importance of having an interactive platform in FC as students can exchange ideas and be involved in self-directed learning skills. Consequently, students can manipulate their pace to learn the content individually.

Besides, in line with Cognitive Load Theory, watching and reading the online learning content that is given prior to the class has enabled students to acquire knowledge and organize information in such a way to overcome working memory limitations (Noor Hisham Jalani & Lai, 2015). Moreover, the aim of the online learning content is to aid in reducing the extraneous load by introducing the content, so that students can get familiar with the content (Seery, 2010) and allow the working memory to concentrate and integrate the more complex content during the class time. The lecturers' preparation in choosing content and the types of content to be delivered before class believed to prevent students from processing irrelevant and unnecessary extraneous cognitive load. Simultaneously, the lecturers also hoped their students could digest the content better as the preparation and the use of interactive platforms could promote germane cognitive load during the students' learning process. Therefore, students can understand the content better and are left with more space and resources in their working memory for other future tasks.

After preparing for the out-of-class learning, the second strategy that they used was to make sure the students understood the online learning content by conducting a Question-and-Answer session with the students before they started the activities. Moreover, they would also do a recap with the students or give them questionnaire, checking their understanding of the content which she shared online. This is in line with strategies proposed by Kvashnina and Martynko (2016) in which after the students have studied the online learning content, the lecturers need to check the students' overall comprehension by conducting a short oral quiz in the class.

Furthermore, the participants would draw a mind map as well as writing the key words on the whiteboard. Then, they asked students about the content to fill in the mind map. This is also a way for them to know if their students read and watched the content they have shared online prior to class. Both participants might be performing this on order to prevent students from relying solely on their lecturers and friends to get answers and learn. The participants wanted to prevent their students from simply learning the content in the classroom. The students should have been ready and learned prior to the class lesson. Checking the students' understanding of the content is substantial since Della and Eva have students with different learning challenges.

Subsequently, both participants might be able to measure their students' understanding of the content before conducting a higher-level of thinking activity in the class such as collaborative discussion. Besides, the lecturers might also able to gauge the effectiveness of this model towards their students. Brame (2013) also mentioned that instructors also need to prepare a mechanism to assess their students understanding. This practice is important to let students identify and concentrate on

areas which they have struggled with and need improvement. Thus, according to Brame (2013), this will contribute to an engaging in-class activities and discussions.

Afterwards, the lecturers proceeded with the next strategy, which was the reinforcements for the students to prepare before class. In Della's class, usually after she done with Question-and-Answer session with her students, she would also apply positive reinforcement with her students to come to class prepared. She did this by informing them about the advantages of implementing FC before she applied FC with her students. She mentioned that her students were not familiar with FC at first, thus informing them about FC and its advantages beforehand has made the class activities go smoothly and as planned.

Likewise, Eva also informed her students of FC and its benefits before applying it to her students. O'Flaherty & Phillps (2015) also stressed the importance of lecturers and students to understand the concept of FC. The lecturers and students need to understand of the key elements of the Flipped Classroom to make it successful. By acknowledging the key elements of FC, it is easy for lecturers to conduct FC. This is also consistent with Hall & DuFrene (2016), where they advised for the lecturers to think of ways to motivate students to complete their out-of-class work. Some of the ways are by conducting out-of-class or beginning of class quizzes, participation points for in class activities to generate students' participation in class.

Additionally, according to Eva, she would pair task with the instruction since she wanted them to understand the content fully prior to class. Then, she would discuss the answers with them and praised those who managed to perform in the class. Nonetheless, the discussion still depends on the topic. Apart from the discussion in the

class, sometimes she would conduct a short quiz. She would inform them in advance about conducting a quiz in the next class and asked them to come prepared to class. As a result, the students felt motivated to read and view the online learning content prior to class since they have a quiz.

By giving positive reinforcement to their students, both participants believed that their students would learn and engage with the content on their own before coming to class. The students would start reading or watching the online learning content before class since they would have quizzes in the next class. Brame (2013) also concurred that instructors need to provide an incentive for students to prepare for class in higher education and the task must be linked to the preparation that the students have done. This incentive must relate to giving them points which can be obtained from the online quizzes, worksheets or short writing assignments.

However, Della also applied negative reinforcements to her students to get them to read and watch the online learning content which she has prepared and shared prior to class in the online learning platform. Sometimes, she asked them to leave her class if they came unprepared. Della resorted to this strategy because of the difficulty of getting a few of her students to read and view the online learning content prior to class. On the other hand, during the observations, she never "threatened" her students to leave the class.

In addition, to inform, instruct, and reinforce their students in the classroom, both lecturers reminded their students before the end of their classes to read or watch the upcoming class online learning materials. It seems as if the lecturers have taken various ways to encourage and motivate their students to read and watch the online

learning content prior to class. Nevertheless, the students still appeared to come unprepared. This might be due to the lecturers' lack of pedagogical skills in convincing the students regarding the benefits that the students can gain by applying this model.

The next strategy that the participants used in this study was iteration of the online learning content in the classroom. Della and Eva sometimes, still needed to iterate the online learning content in the classroom to their students despite the uploading and sharing content online before class. This is resulted by students who came unprepared or did not understand the content that was provided prior to class.

The lecturers would repeat and reteach the content if they were not satisfied with their students' responses or felt that they did not understand enough. This is done in order to give those who came unprepared to have the slightest idea about the topic of the day. If the lecturers did not do this, the students who came unprepared would be left behind and would feel clueless when they do group works and discussions later on in the class.

The iteration of the online learning content in Della's and Eva's classes would usually take up 15-20 minutes. As a result, according to Della, those who came prepared will have better understanding of the content compared to those who did not read and watch the online learning content prior to class. It can be observed in her class later on that during the group work and discussion, the students who came prepared managed to complete the task faster and they could do the task on their own without asking the help from their lecturer.

This is consistent with Hall and DuFrene (2016), where they stated that instructors need to plan and prepare well even though students have read and watched

the online learning content. This is because they might fail to understand and identify the important key content or even misunderstand the content. Hence, instructors need to be able to modify the class lesson plans according to the students' needs.

In addition, as proposed by Hamdan et al., (2013) and Chen et al. (2014) in their FLIP and revised FLIPPED pillars, the participants' strategy which is the iteration of online learning content in the classroom is relevant to the flexible environment pillar. The lecturers need to continually observe and monitor student to make appropriate adjustments in the class. Moreover, it is also in accordance with one of the pillars: engaging and effective learning experience where the lecturers need to decrease the transactional distance between the lecturers and students.

Even though the iteration of the online learning content in the classroom seems in line with the need of lecturer to modify the class lesson according to students' needs, still it is not the key element that should be conducted by lecturers in FC. This is because students supposedly must be prepared prior to class. However, there is no difference between a traditional classroom and FC. This is most probably because the students were still not familiar with the model as they were used to being spoon-fed by their teachers in secondary schools.

Last but not least was the strategy of conducting engaging activities in the classroom with the students. Most of the activities which they did with students in the classroom involved discussions whether individual, group work or as a class. This strategy also confirms the engaging and effective learning experience that has been proposed by Chen et al. (2014). In the classroom, the participants would always do collaborative work with their students. Each of the groups will then sit in a distance

with the other groups as they need to group and brainstorm the ideas for the task. While her students were doing their work, the participants would walk around their class to each group, check on their works and facilitate them if they have problems.

This supports the strategy that is suggested by Kvashnina and Martynko (2016) that the language instructor needs to aid in the process of group discussions in order to offer any language help and evaluate students' performance. On top of that, most of the activities in their class involve brainstorming of ideas as a class in which finally they will do the task individually or in a group. Moreover, some of the tasks also involve hands – on activities where they need to brainstorm ideas, write a passage, edit the passages, analyze sentences or essays and so on. The activities that they planned are also relevant and related to the online learning content that she uploaded online.

The discussion usually takes up between 30-40 minutes. Most of the time, both participants would extend the time for the tasks. After all of them have finished doing the task, the lecturers would discuss the tasks with the whole class and debrief them about the topic. At this stage, once again they would explain any inquiries that they have garnered from their students and provided feedback on their works. This is the time where the students will be able to internalize of knowledge after externalization of the knowledge is done via online (Zhai et al., 2017). This is consistent with Hung (2014) in which he stated students need to be properly and progressively facilitated in the higher order thinking learning process to make it effective.

According to the participants, this is where they can measure their students understanding of the content. Furthermore, according to one of them, the lesson objectives and outcomes have been achieved by students after they can respond and

give satisfying answers during this session. The activities that they did in the classroom were coordinated with the previous literature, where the participants and students using the class time with what should have been their homework and fully utilised the time by conducting an interactive collaborative learning environment (Bergman & Sams, 2014).

This strategy is also consistent with Miller (2012) and Brame (2013) who indicated that instructors need to apply effective activities in the classroom that focus on higher-order thinking skills such as game-based learning, authentic literacy, debate, data analysis and others. These activities will promote deeper learning which results the students augmenting their skills at using the new knowledge. During the observations, the lecturers provided each group with tasks for them to solve and in their groups, the students have to discuss and find the solution for the task given. Therefore, the individual working memory limitations can be overcome as the students' working memories are combined during the collaborative activities (Noor Hisham Jalani & Lai,2015).

This is in line with Cognitive Load Theory, in which when the students were doing their collaborative in- class activities, the intrinsic load of the task can be shared by every group member. Therefore, providing more processing opportunities (Noor Hisham Jalani & Lai, 2015). The opportunity to conduct the activities in the classroom with their peers and teacher's guidance will alleviate the use of working- memory capacity because students do not need to find solutions in an inefficient manner, thus positive learning transfer and learning efficiency can be achieved (Noor Hisham Jalani & Lai, 2015). Overall, the strategies used by the lecturers such as preparation of online learning content, the use of interactive platform, a check for students' understanding

of the online learning content, reinforcements for students to prepare prior to class, iteration of the online learning content in the classroom and the arrangement of engaging in-class activities were in line with most of the previous literatures of FC.

# 5.3.2 Lecturers' and Students' Perceptions of FC

This section aims to provide the discussion and conclusion for the second research question which is to explore the lecturers' and students' perceptions of FC.

The findings are gathered from the semi-structured interviews with the lecturers and selected students.

According to the findings, the lecturers highlighted that FC enhanced not only their teaching in the classroom but also their students' learning. According to Eva, her classroom has transformed from teacher -centred to student- centred since she applied FC. The lecturer's responsibility will be lessened as her students will have to prepare prior to class on their own and she has more time in the class to conduct one-to-one instructional time with her students.

This is consistent with Bransford et al. (2000) who stated that students learn best in student-centred environments and Brown (2012) also affirmed that in FC, the focus is on the experience of learning by the students and not just the delivery instructions. Nonetheless, during the observations, the classes have not entirely transformed into student-centred classrooms as there were times that the lecturers needed to reteach the online learning content to the students. This happened as some of the students attended the class without reading or watching the online learning content that the lecturers have prepared.

Next, both Eva and Della also believed in the importance of using their own video prior to class in enhancing their teaching. By making and having their own video before class, students will be able to comprehend the online learning content better. The video which features the lecturer or consists of the lecturer's voice will have the same teaching style as the lecturer in real life. It is as if the video is personalized to fulfill the students' learning challenges.

Consequently, the online learning content will have a personal connection with their students. This is because, the lecturers know their students and have a better rapport with them. The online learning content would also have the advantage of the video explaining the content verbally and visually. As a result, the students will feel comfortable understanding the content and engaging in the online discussion.

Other than that, Eva stated that FC allowed her to diversify her pedagogical skills in order to make her students engaged in the learning. This is because, as students have different learning challenges, Eva believes that she must also vary the way to deliver the content. Students' different learning challenges are accommodated with the time given to them in comprehending the online learning content at their own pace. By giving them this experience, every student can take their time and learn the content at any time and place. Moreover, the students also get the personalized time they spent with the lecturer in the physical class.

This is consistent with the study done by Mohamed Amin et al. (2014) who stated that students with different learning styles could benefit from FC. By applying FC in their class, their students will be able to enjoy the lesson. Furthermore, FC aided in diversifying the learning content delivery since students have different learning

styles. During the class activities, students learnt interpersonally as they needed to discuss and solve the task with their groupmates. Moreover, students who prefer verbal learning styles, they get to ask the lecturer about the content that they did not understand. The lecturers were able to explain to students since they have more time in the class.

Della also reported that FC facilitated in solidifying her students' understanding of the learning content and consolidating the information. The students from both institutions have experienced self–paced learning. They responded that they watched and read the online learning content comfortably at their houses, hostels and library at their own pace. The students stated that the time spent to comprehend the leaning content before class was adequate for them to understand the content. The students were given around seven days to watch and read the online learning content. During this self-paced learning, students could watch the video as many times as they wanted if they could not comprehend the content after watching it the first time. Furthermore, students can also pause, rewind and fast forward the video while watching it so that it was easy for them to take note and recall the content.

Moreover, the students could also discuss and ask their lecturers or classmates regarding the content virtually if they did not understand. In addition, the discussion that their lecturers conducted in their online platform has also helped them in comprehending the content prior to class. They also have agreed that by spending time reading and watching the online learning content have assisted them to understand and prepare for the upcoming class. Self-paced learning has been found as one of the most mentioned benefits of FC which has been stated in other studies (Bergmann & Sams, 2012; Berrett, 2012; Bishop & Verleger, 2013).

Della also stressed the ability to interact about the online learning content. Therefore, she implemented the mobile phone application to ensure the online interaction between her and her students. She would communicate and interact with her students every time she posted the online learning content. Every week, she would share the content and get her students to respond to the content. This is consistent with Chen et al. (2014) in their revised FLIPPED pillars that instructors need to perform progressive networking activities as the students can learn by doing and learning by networking where they discuss the online learning content in their smartphone application groups.

On top of that, the activities prepared by the lecturers in the class were related and relevant to the online learning content. This is vital as students will be able to link and make relevant whatever they have comprehended prior to class. As a result, they were able to connect the information, thus producing answers and fruitful discussion with their friends. Tetreault (2013) also claimed the collaborative learning and peer instruction in the class would intensify the prior knowledge that they acquire before class.

Since students were prepared and aware of the content before they came to class, they managed to perform the activities well. Some of the activities conducted were collaborative learning and peer instruction in which students needed to work together in a group to solve the tasks. During conducting these activities, students would discuss and guide each other in completing the task. Besides, they could also ask their lecturers if they are faced with any difficulties.

Other than that, the group work and discussion have facilitated them to get different aspects and perspectives to tackle the tasks. Consequently, the students also reported that they feel more motivated, confident, engaged and in-charge in their own learning. This is due to the preparation and comprehension that they gained prior to class. This is aligned with Hung's (2015) study regarding FC, in which his study has generally yielded positive results on the students' participation, satisfaction and performance.

Apart from that, the interaction in Della's and Eva's class also increased. Their students managed to engage and involve more in the discussion. They asked and expressed their opinions with or without being prompted. The students were able to respond since they already learned the content before class. They were involved in the class discussion because they might want to ask the concept that they did not understand or to express their opinion which differed from others. Thus, according to them, it improved the students' understanding. Rimm-Kaufman and Sandilos (2015) have also emphasized this by mentioning that the increased interactions between teacher and students lead to several advantages such as enhance their social skills and improve academic performances.

Overall, the lecturers' and students' perceptions of FC are consistent with most of the previous literature on FC. On top of that, the findings of this study proposed that the lecturers and students have experienced some benefits in applying FC. However, a few feel that FC needs to be interjected with other teaching approaches in order to increase students' engagement in the classroom.

### 5.3.3 Challenges faced by lecturers and students in FC

This section aims to provide the discussion and conclusion for the third research question which was to identify the challenges that the lecturers and students faced in FC lessons. The findings were gathered from the semi-structured interviews with the lecturers and selected students.

Based on the findings of the study, there were three challenges faced by the lecturers and the students in conducting FC. They were operational, faculty, and student – related challenges. Operational challenges were challenges that are faced by the lecturers and students when they were operating FC. Next, faculty challenges referred to challenges encountered by the lecturers before and when they were conducting FC. Finally, student-related challenges were the challenges that involved and related to the students.

This section aims to provide the discussion and conclusion for the third research question which is identifying the challenges that the lecturers and students faced in FC lessons. The findings are gathered from the semi-structured interviews with the lecturers and selected students.

Operational challenges were experienced by the lecturers when they were conducting out of class as well as in-class learning. Most of the challenges or difficulties faced by lecturers and students in operational challenges involved the use of technology and IT skills.

One of them was lack IT facility that involved the online learning platform or LMS that is provided by the institution. The Learning Management System (LMS) or the online learning platform only enables lecturers to upload online learning content and for students to download the online learning content. The LMS did not have a feature where the lecturers and students can interact with each other. The other institution problem was the LMS is still under construction.

Apart from that, Della also lacks IT and Multimedia skills. As a result, she had difficulty in making her own videos. She has mentioned that even though her institution requires her to create her own videos and engage in other interactive medium, she is still incapable of making her own videos. Johnson (2013) also stated that most teachers who are not familiar with IT, struggled to implement FC successfully. Consequently, Della had to find other videos from other sources such as YouTube and other educational websites. However, the videos from other sources were lengthy and sometimes were not suitable with her students' context.

According to Della, she tried to make her own videos because she wanted her students to feel a sense of attachment to the content. If she was the one in the video and used her voice to explain the content, the students will feel more engaged as they are familiar with their lecturer. This is because, some YouTube videos were made by native speakers; thus, the accent and the context were different. Even though, YouTube can be a better option since English is an international language, perhaps Della knows that her students are not very familiar with the context. Therefore, she wanted to make her own videos that applied more Malaysian context for the example and explanation.

Moreover, in operational challenges, Eva reported that it was hard for her to monitor her students to watch or read the online learning content that she prepared. She mentioned that whenever she did an online forum with her students, she could not

know if her students genuinely answered based on their own answer or their friends' answers.

This might be due to the lack of her pedagogical skills as she could provide various questions so that the students have to answer differently. Besides, she could also notice if the students have repeated the same answers by checking and reading their answers individually. Furthermore, she could also utilise Turnitin website to view if they plagiarized from other websites.

Moreover, Eva also added that her students' challenge when conducting FC was the internet connection. She said that the internet connection would be the first problem for the students as they could not have stable internet access to download the online learning materials. Even though, she stated that her students would face internet connection problem, none of her students mentioned about this. They said they could easily access the online learning content via their smart phones. The students' claim is consistent with Nielsen (2012) which indicated that the effectiveness of the flipped classroom is reliant on having a smartphone, laptop, tablet or computer that works.

The second challenge which was the faculty challenges occurred when they were conducting out-of-class as well as in-class learning. Most of the challenges or difficulties faced by lecturers in faculty challenges encompassed the unsuitability of the content to be flipped and the increased workload for the lecturers.

Eva and Della agreed with the unsuitability of FC to all of the English content. Both said that they needed to know which lesson that they could and needed to flip since not all English lesson could be flipped. They said the content chosen is based on the complexity of the content as well as their students' proficiency level. Besides, Caicco (2016) also mentioned about the emergence of this challenge from the teachers in her study.

Eva stated that some of the contents that were suitable to be flipped were the contents that did not need much explanation. It was because she believed that her students could comprehend the content on their own virtually. This was also the content that her students can easily participate in when she conducted the discussion online. On the other hand, Della stated that the content that she might think suitable to be flipped are the content that her students need more explanation and examples. She believed that with the aid of the visual images, animation, and examples, her students could comprehend the content easily.

Apart from that, according to the lecturers, FC has also increased their workloads. Since implementing FC, they must do a lot of preparation before coming to class such as preparing the online learning content, selecting videos and preparing questions to engage them in class. Burton (2013) has also emphasized that the time to prepare the online learning content is usually burdensome for many teachers especially if they lack IT skills. The lecturers need to spend time and energy to learn the skills to make videos while planning the activities for the class.

Furthermore, she also sometimes needed to reteach or re-explain the content if her students came unprepared in the classroom. Therefore, she felt like it was redundant and thus increasing her workload. In addition, she has mentioned that if she could not find a suitable video, it would be difficult for her since creating and making her own video took up a lot of time.

The need to reteach and re-explain the content in the classroom even after the lecturers posted the online learning content online has proved that lecturers might need to improve their pedagogical skills in instructing students to watch and read the content prior to class. The lecturers did not have to waste their time and energy to face this challenge if all students were able to come prepared before class.

The third challenge was student-related challenge. This happened when they were conducting the lesson in the class which related to the students. Most of the challenges or difficulties faced by lecturers and students in student-related challenges included the students' unfamiliarity with FC and the in-class activities.

Della said that her students encountered difficulties during the first time implementing FC due to their unfamiliarity with FC. According to her, Malaysian students were so used to being spoon-fed by their teachers in schools, thus it was a bit difficult for them to attempt this strategy. Johnson (2013) has also claimed that an effective FC lesson depends on the students' motivation to finish the tasks given prior to class.

The students perhaps were not very familiar with the model; thus, they did not come prepared and ready for the activities in class. During their secondary schools, they were so used to wait for the teacher to explain everything in the class. As a result, the students need to be informed about the benefits of implementing this model. On top of that, they also need to be injected with the proper reinforcement so that they can start to learn on their own or with their classmates.

Eva also added that with her students, she needed to guide them regarding the online learning content. She would remind them at the end of every class to watch or

read the online learning content. Apart from that, some students were also having difficulty in the classroom during the group work session. During the interview, one student has reported that some of his group members were not contributing and engaging in the discussion as they were not prepared.

The students who came unprepared might be due to a lack of information in implementing this model. As a result, they could not perform in the class activities and disrupted the group discussion. The lecturers might need to point out and clarify the importance of the students to watch and read the content before class if the students want to learn and be involved in the class discussion. Furthermore, the lecturers might want to improve the class instruction such as allowing students to choose their own groupmates in order to prevent this challenge. Students will choose the ones who have prepared and thus the ones who came unprepared will be ready in the next class.

Overall, the findings from this study yielded challenges that were faced by the lecturers and the students even though they have also listed some benefits from FC. Besides, some challenges were in agreement with other FC literatures, which also disclosed the challenges that existed in implementing FC.

## 5.4 Implications

Bergman and Sams (2012) and Farah (2014) have proposed FC as a pedagogical strategy that combines both ICT and making students responsible for their own learning as an effective teaching pedagogy. These previous studies have mentioned that FC has more desirable features for instructors than its drawbacks. Despite the other studies that have also stressed its drawbacks (Brint & Cantwell, 2010; Forsey et al., 2013; Fraga & Harmon, 2015; Zuber, 2016), FC still has a huge potential as a

teaching strategy that can improve students' engagement in class. Therefore, this study provides and reports educators on the FC implementation in selected Malaysian private tertiary institutions in ESL classrooms.

From the findings, it can be implied that FC improve the lecturers' performance as they mentioned that FC showed positive impacts to the lecturers and students. Moreover, the practices and activities conducted by the participants in this study, can serve as guidelines to other instructors. Thus, instructors are able to consider and employ the best instructional practices for ESL lessons. This approach is also helpful for students who are weak in English subject.

This study also implied that students who are new to the content would need his or her entire working memory to learn the subject. However, after a few iterations of the content, students might develop a schema to easily practice the topic. In this study, student have been exposed to the content outside of the classroom individually during pre-lecture session. After that, students experienced more repetitions of the content in the classroom specifically when they performed the collaborative activities in the classroom with their classmates and lecturer. As a result, the students have a better management of their cognitive load.

Last but not least, the findings in this study implies that for those who interested in implementing FC, they should always prioritize the students' ability and dedication to be involved in the learning process which takes place outside and inside the classroom. The students need to study the content individually before class. They also need to be involved in discussions, interactions with lecturers and peers, giving feedback, and guiding their classmates in FC lesson. Moreover, the instructions should

be designed to be efficient in which it can minimize the mental load (introduce or expose the content before class) and incorporate activities that can foster learning.

In conclusion, the findings of this study indicates that FC gives positive impacts to ESL instructors and learners and fill the research gap in teaching and learning approaches in tertiary education institutions.

### 5.5 Recommendations

The previous section suggested impact of FC in teaching and learning in ESL classrooms and how it affects the lecturers and the students. Thus, this section provides several suggestions for future research of the ESL educators and researchers to consider. This is done to improve the ESL educators' teaching strategies and skills as well as to enhance the ESL students learning.

Based on this study, there is a need and avenue to conduct future research. One of them is future research can investigate students' perceptions of whether they prefer the use of LMS or smartphone application. This is because, there was a conflict about this in the current study about it. Thus, investigating in this aspect could give insights to future educators in choosing the platform to deliver the online learning content as well as how the platform would encourage and enhance students' involvement and engagement in learning.

On top of that, it is also recommended that ESL researchers and educators could also explore about how FC is used in a different setting like government- aided college or matriculation as it will also provide impacts in which will benefit both ESL educators and students in this setting. Furthermore, the students can be asked about the effectiveness of FC in improving their learning as they are the generation who engage

daily with information technology. Moreover, educators and researcher could also address the issues that occur during the investigations.

Furthermore, future research could also investigate more significant population for private tertiary education institutions as current study only investigate two private institutions. It will be valuable if different effective strategies in implementing FC could be gathered and act as a guidebook to other educators who would like to practice FC in their teaching.

In conclusion, there are some aspects that could provide other ESL educators and students who wish to implement FC in their ESL classrooms such as the activities that need to be conducted in the classroom and the suitable and convenient online platform to be used. The future research can help to enlighten ESL lecturers and students in order to find an interactive and effective pedagogy in the class.

### **REFERENCES**

- Abeysekera, L., & Dawson, P. (2014). Motivation and cognitive load in the flipped classroom: Definition, rationale and a call for research. *Higher Education Research & Development*, 34(1), 1-14. doi: 10.1080/07294360.2014.934336
- Afrilyasanti, R., Cahyono, B., Y., & Astuti, U. P. (2016). Effects of flipped classroom model on Indonesian EFL students' writing ability across and individual differences in learning. *International Journal of English Language and Linguistics Research*, 4(5), 65-81.
- Ajayi, I. H., Noorminshah, A. I., Norasnita Ahmad, & Ahmad Fadhil Yusof. (2017). A proposed conceptual model for flipped learning. *Journal of Theoretical and Applied Information Technology*, 95, 24.
- Alholjailan, M. I. (2012). Thematic Analysis: A critical review of its process and evaluation. *West East Journal of Social Sciences*, 1(1), 39-47.
- Alsagoff, Z., Baloch, H., & Norhasliza Hashim. (2014). Flipping Large Lectures @ IMU. In Mohamed Amin Embi (Ed.), Blended & flipped learning: Case studies in Malaysian HEIs. (pp. 255-274). Centre for Teaching & Learning Technologies, Universiti Kebangsaan Malaysia & Department of Higher Education, Ministry of Education Malaysia.
- Asmah Omar. (1984). *Kaedah Pengajaran Bahasa*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Azlina A. Rahman, Norayskin Mohd Zaid, Zaleha Abdullah, Hasnah Mohamed, & Baharuddin Aris. (2019). Evaluation of Students' Dependency on Out-of-Class Learning: A Flipped Classroom Approach. *Proceedings of 2018 IEEE International Conference on Teaching, Assessment, and Learning for Engineering, TALE 2018*, December, 1172–1175. https://doi.org/10.1109/TALE.2018.8615263
- Baranovic, K. (2013). Flipping the first-year composition classroom: Slouching toward the pedagogically hip. (Master's thesis). Retrieved from http://search.proquest.com/docview/1441087946?accountid=12206
- Basal, A. (2015). The implementation of a flipped classroom in foreign language teaching. *Turkish Online Journal of Education- TOJCE*, 16(4), 28-37. doi: 10.17718/tojde.72185

- Bawadi Abdullah, & Muhammad Tazli Azizan. (2018). A Flipped Classroom Technique in Improving Students' Grade of Transport Phenomena Course. Proceedings 2017 7th World Engineering Education Forum, WEEF 2017- In Conjunction with: 7th Regional Conference on Engineering Education and Research in Higher Education 2017, RCEE and RHEd 2017, 1st International STEAM Education Conference, STEAMEC 201, 279–284. https://doi.org/10.1109/WEEF.2017.8467163
- Bawani Selvaraj. (2010). English language teaching (ELT) curriculum reforms in Malaysia. *Voice of Academia*, 5(1), 51–60.
- Bergmann, J., & Sams, A. (2012). Flip your classroom: Reach every student in every class every day. Washington, DC: International Society for Technology in Education.
- Berrett, D. (2012). How "Flipping" the classroom can improve the traditional lecture. *The Education Digest*, 78(1), 36-41.
- Bishop, J. L., & Verleger, M. A. (2013). *The Flipped classroom: A Survey of the research*. Paper presented at ASEE National Conference Atlanta, GA.
- Bloom, B. S. (1971). *Mastery learning. In J. H. Block* (Ed.), Mastery Learning Theory and Practice (pp. 47–63). New York, NY: Holt, Rinehart and Winston, Inc.
- Brame, C. (2013). Flipping the classroom. Vanderbilt University Centre for Teaching. Retrieved from <a href="http://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/">http://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/</a>.
- Bransford, J.D., Brown, A.L., & Cocking, R.R., Eds. (2000). *How people learn: Brain,mind, experience, and school.* Washington, DC: National Academies Press.
- Brint, S., & Cantwell, A. (2010). Undergraduate time use and academic outcomes:results from the university of California undergraduate experience survey 2006. *Teacher College Record*, 112, 2441e2470.
- Brown, A. (2012). A Phenomenological Study of Undergraduate Instructors using the Inverted or Flipped Classroom Model. (Doctoral dissertation). Retrieved from ProQuest UMI. (3545198)
- Brown, H. D. (2007). *Teaching by principles: An interactive approach to language pedagogy.* White Plains, NY: Pearson-Longman.

- Brunsell, E., & Horejsi, M. (2013). Flipping your classroom in one "take". *The Science Teachers*, 80(3), 8.
- Burton, A. L. (2013) My Mistaken Thinking in a Flipped Classroom. *School Administrator*, 70(3), 29.
- Caicco, M. J. (2016). Teacher experiences with flipped classrooms in secondary science. (Master's thesis). Retrieved from https://tspace.library.utoronto.ca/bitstream/1807/72159/1/Caicco\_Matthew\_J 201606 MT MTRP.pdf
- Celce-Murcia, M. (2001). Language teaching approaches: An overview. *Teaching English as a second or foreign language*, 2, 3-10.
- Charanjit Kaur Swaran Singh, Hardev Singh Sokhal Jaswant Singh, Tarsame Singh Masa Singh, Hasimah Ja'afar, Maria Shu Abdullah, Nor Azmi Mostafa, & Muhamad Lothfi Zamri. (2018). Flipped Classroom Approach for Improving Speaking Skills of TVET Trainees. *International Journal of Applied Linguistics and English Literature*, 7(7), 27. https://doi.org/10.7575/aiac.ijalel.v.7n.7p.40
- Chen, Y., Wang, Y., Kinshuk., & Chen, N.S. (2014). Is FLIP enough? Or should we use the FLIPPED model instead?, *Computers & Education*, 79, 16-27.
- Chew, E., Jones, L. J. N., & Wordley, S. (2018). "Flipping or flapping?" investigating engineering students' experience in flipped classrooms. On the Horizon, 26(4), 307–316. https://doi.org/10.1108/OTH-04-2017-0014
- Clark, R.C., Nguyen, F., & Sweller, J. (2005). Efficiency in learning: Evidence-based guidelines to manage cognitive load. San Francisco, CA: Pfeiffer.
- Creswell, J.W. (2013). Qualitative inquiry & research design: Choosing among five approaches (Third ed.). Los Angeles: SAGE Publications.
- Danker, B. (2015). Using Flipped Classroom Approach to Explore Deep Learning in Large Classrooms. *The IAFOR Journal of Education*, *3*(1), 171-186.
- Davies, R. S., Dean, D.L., & Ball, N. (2013). Flipping the classroom and instructional technology integration in a college-level information systems spreadsheet course. *Educational Technology Research and Development*, *6*(14), 563-580. doi: 10.1007/s11423-013-9305-6

- Davis, C. (2013). Flipped or inverted learning: Strategies for course design. In E.G. Smyth & J.X. Volker (Eds.). *Enhancing instruction with visual media: Utilizing video and lecture capture.* (pp. 241-265). Hershey, PA: IGI Global.
- DeJong, T. (2010). Cognitive load theory, educational research, and instructional design: Some food for thought. *Instructional Science*, 38(2), 105–134.
- Education Act 1996. (2002). *Incorporating All Amendments up to 31 March 2002*. Kuala Lumpur: The Commissioner of Law Revision, Malaysia, Act 550.
- Elfatah, M.A., & Ahmed, A.S. (2016). The effect of a flipping classroom on writing skill in English as a foreign language and students' attitude towards flipping. *US-China Foreign Language*, 14(2), 98-114.
- Elisha Nurusus, Arshad Abdul Samad, Sharifah Zainab Syed Abdul Rahman, Nooreen Noordin, & Juridah Md Rashid. (2015). Exploring teachers' beliefs in teaching grammar. *The English Teacher*, *XLIV*(1), 23-32.
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford: Oxford University Press.
- Farah, M. (2014). The impact of using flipped classroom instruction on the writing performance of twelfth grade female Emirati students in the Applied Technology High School. (Doctoral dissertation). Retrieved from https://bspace.buid.ac.ae/handle/1234/676
- Farina Norzakiah Tazijan, Agelyia Murugan, Suzana Abd.Rahim, Rosmaliza Mohamed, Emily Jothee Mathai, & Rushita Ismail. (2016). A Survey of Flipped Learning Approach in the ESL Context. *Asian Journal of Education and e-Learning.* 4 (2).
- Farina Norzakiah Tajizan, Sakina Sofia Baharom, & Azianura Hani Shaari. (2016). Building Communication Skills Through. *Proceedings of the Fourth International Seminar OnEnglish Language and Teaching (ISELT-4)*, 289–295.
- Fisher, D. (2009). The use of instructional time in the typical high school classroom. *The Educational Forum*, 73(2), 168-176. doi:10.1080/00131720902739650
- Foldnes N. (2016), The flipped classroom and cooperative learning: evidence from a randomised experiment. *Active Learning in Higher Education.*, 17(1), 39–49. doi: 10.1177/1469787415616726.

- Foo, B., & Richards, C. (2004). English in Malaysia. *RELC Journal*, 35.2(2004), 229-240.
- Forsey, M., Low, M., & Glance, D. (2013). Flipping the sociology classroom: towards a practice of online pedagogy. *The Australian Sociological Association*, 49(4), 471-485.
- Fraga, L. M., & Harmon, J. (2014). The Flipped Classroom Model of Learning in Higher Education: An Investigation of Preservice Teachers' Perspectives and Achievement. *Journal of Digital Learning in Teacher Education*, 31(1), 18-27, doi: 10.1080/21532974.2014.967420
- Gardner, J. G. (2012). "The inverted agricultural economics classroom: a new way to teach? A new way to learn?", Selected paper prepared for presentation at the Agriculture and Applied Economics Association's 2012 AAEA Annual Meeting, Seatle, WA.
- Gaudart, H. (1999). Game as teaching tools for teaching English to speakers of other languages. *Simulation & Gaming*, 30(4), 283-29.
- Gerjets, P., & Scheiter, K. (2003). Goal configurations and processing strategies as moderators between instructional design and cognitive load: Evidence from hypertext-based instruction. *Educational Psychologist*, 38, 33-41.
- Gill, S.K. (2002). *International Communication: English Language Challenges for Malaysia*. Universiti Putra Malaysia Press, Serdang.
- Ginnis, P. (2002). *The Teachers Toolkit: Raise Classroom Achievement with Strategies for Every Learner*. Carmarthen: Crown House Publishing Limited.
- Goh, C. F., & Ong, E. T. (2019). Flipped classroom as an effective approach in enhancing student learning of a pharmacy course with a historically low student pass rate. *Currents in Pharmacy Teaching and Learning*, 11(6), 621–629. https://doi.org/10.1016/j.cptl.2019.02.025
- Griffiths, C., & Parr, J. M. (2001). Language-learning strategies: theory and perception. *ELT Journal*, 55(3), 247-254.
- Hall, A.A., & DuFrene, D.D. (2016). Best practices for launching a flipped classroom. *Business and Professional Communication Quarterly*, 79(2), 234-242.

- Hamdan, N., McKnight. P., McKnight, K., & Arfstrom, K. (2013). A review of flipped learning. Pearson and George Mason. Retrieved from: https://flippedlearning.org/wp content/uploads/2016/07/LitReview\_FlippedLearning.pdf
- Hardman, J., & Norhaslynda A-Rahman. (2014). Teachers and the implementation of a new English curriculum in Malaysia, *Language, Culture and Curriculum*, 27(3), 260-277, doi: 10.1080/07908318.2014.980826
- Harmer, J. (2001). *The Practice of English Language Teaching*. (3rd Ed.). Edinburgh: Pearson Education.
- Hastie, M., Hung, I.-C., Chen, N.-S., & Kinshuk. (2010). A blended synchronous learning model for educational international collaborations. *Innovations in Education and Teaching International*, 47(1), 9e24.
- Harris, A., & Jones, M. (2014). Blended Learning: Flipped, Flopped or Forgotten?. In Mohamed Amin Embi (Ed.), *Blended & flipped learning: Case studies in Malaysian HEIs.* (pp. 311-315). Centre for Teaching & Learning Technologies, Universiti Kebangsaan Malaysia & Department of Higher Education, Ministry of Education Malaysia.
- Hazita Azman. (2016). Implementation and challenges of English language education reform in Malaysian primary schools. 3L: The Southeast Asian *Journal of English Language Studies*, 22(3), 650-678.
- Houston, M., & Lin, L. (2012). Humanizing the classroom by flipping the homework versus lecture equation. In P. Resta (Ed.), *Proceedings of the Society for Information Technology & Teacher Education International Conference 2012* (pp.1177-1182). Austin, TX: AACE. Retrieved from http://www.editlib.org/p/39738
- Hung, H. T. (2015). Flipping the classroom for English language learners to foster active learning. *Computer Assisted Language Learning*, 28(1), 81-96. doi: 10.1080/09588221.2014.967701
- Hsieh, J. S. C., Wu, V. W., & Marek, W. M. (2016): Using the flipped classroom to enhance EFL learning, *Computer Assisted Language Learning*, 30.
- Islam, M. N., Salam, A., Bhuiyan, M., & Daud, S. B. (2018). A comparative study on achievement of learning outcomes through flipped classroom and traditional lecture instructions. *International Medical Journal*, *25*(5), 314–317.

- Johnson, G. (2013). Flipped classrooms not beneficial to all. *University Wire*, 1(1).
- Jowati Juhary, & Ahmad Fahimi Amir. (2018). Flipped Classroom at the Defence University. 4<sup>th</sup> International Conference on Higher Education Advances (HEAd' 18), 827-835. doi: 10.4995/HEAd18.2018.8093
- King, A. (1993). From sage on stage to guide on the side. *College Teaching*. 41, 30-35. doi: 10.1080/87567555.1993.9926781
- Kirschner, P. A. (2002). Cognitive load theory (ed.). *Learn. Instruct. 12* (special issue), 1–154.
- Kvashnina, O.S., & Martynko, E.A. (2016). Analyzing the potential of flipped classroom in ESL teaching. *International Journal of Emerging Technologies in Learning*, 11, 3. doi: 10.3991/ijet.v11i03.5309
- Lage, M.J., Platt, G.J., & Treglia, M. (2000). Inverting the classroom: a gateway to creating an inclusive learning environment. *Journal of Economic Education*, 3(11), 30-43.
- Lee, K.W., Ng, S.I., Tan, C. K., & Yoon, S. J. (2014). To Flip or Not to Flip the Classroom. In Mohamed Amin Embi (Ed.), *Blended & flipped learning: Case studies in Malaysian HEIs.* (pp. 227-252). Centre for Teaching & Learning Technologies, Universiti Kebangsaan Malaysia & Department of Higher Education, Ministry of Education Malaysia.
- Li, Y. (2018). Current problems with the prerequisites for flipped classroom teaching--a case study in a university in Northwest China. *Smart Learn. Environ.* 5, 2. doi: 10.1186/s40561-018-0051-4
- Lin, Z. (2009). Task-based Approach in Foreign Language Teaching in China: A Seminar Paper Research Presented to the Graduate Faculty, University of Wisconsin-Platteville. Available online http://minds.wisconsin.edu/bitstream/handle/1793/34571/Zhu,%20Lin.pdf.txt?sequence=3, accessed July 10, 2010.
- Lindsay, C., & Knight, P. (2006). Learning and teaching English. A course for teachers. Oxford: Oxford University Press.
- Ling, S. E., & Magdaline Anak Muuk (2014). Blended Learning in Teaching Secondary Schools' English: A Preparation for Tertiary Science Education in Malaysia. *Procedia Social and Behavioral Sciences*, 167, 293 300.

- Little, C. (2015). The flipped classroom in further education: literature review and case study, *Research in Post-Compulsory Education*, 20(3), 265-279, doi:10.1080/13596748.2015.1063260
- M.Kaviza. (2019). Persepsi Peranan Murid terhadap Pembelajaran Berasaskan dokumen dalam Mata Pelajaran Sejarah (Students' Perceptions towards Their Roles in document-Based Lesson in History Subject). *Jurnal Pendidikan Malaysia*, 44(2), 10–19. https://doi.org/10.17576/JPEN-2019-44.02-02
- Mason, G. S, Shuman, T. R, & Cook, K. E. (2013). Comparing the effectiveness of an inverted classroom to a traditional classroom in an upper-division engineering course. *IEEE Transactions on Education*, 56(4), 430-435.
- McCallum, S., Schultz, J., Selke, K., & Spartz, J. (2015). An examination of the flipped classroom approach on college student academic involvement. *International Journal of teaching and Learning in Higher Education*, 27(1), 42-55.
- McLaren, P. (2015). Life in schools: An introduction to critical pedagogy in the foundations of education. Routledge.
- McLaughlin, J.E., Griffin, L.M., Esserman, D.A., Davidson, C.A., Glatt, D.M, Roth, M.T, Gharkholonarehe, N., & Mumper, R.J. (2014). The flipped classroom: A course redesign to foster learning and engagement in a health professions school. *Academic Medicine*, 89(2), 236-243. doi: 10.1097/ACM.00000000000000086
- Md Fadzil Masri, & Zamri Mahamod. (2020). Keberkesanan Kaedah Flipped Classroom Dalam Meningkatkan Kemahiran Mengolah Isi Karangan Murid-Murid Sekolah Rendah. *Jobsts*, 6(1), 189–203.
- Merriam, S.B. (1998). *Qualitative Research and Case Study Applications in Education*. Jossey-Bass Publishers, San Francisco.
- Merrill, J. E. (2015). *The Flipped Classroom: An examination of veteran teachers'* practices when flipping their classrooms for the first time. (Doctoral dissertation). Retrieved from https://oaktrust.library.tamu.edu/handle/1969.1/155313
- Middlehurst, R., & Woodfield, S. (2004). The role of transnational, private, and for-profit provision, in meeting global demand for tertiary education: Mapping, regulation and impacts. Case study-Malaysia, Summary Report. Vancouver: Commonwealth of Learning and UNESCO.

- Miller, A. (2012, February 24). 5 Best Practices for Flipped Classroom. *Edutopia*. Retrieved from https://www.edutopia.org/blog/flipped-classroom-best-practices-andrew-miller
- Miller, G. A. (1956). The magic number seven plus or minus two: Some limits on our capacity to process information. *Psychological Review*, 63(2), 81–97.
- Ministry of Higher Education Malaysia (2015a). Executive Summary of Malaysia Education Blueprint 2015-2025 (Higher Education). Putrajaya, Malaysia: Ministry of Education Malaysia.
- Missildine, K., Fountain, R., Summers, L., & Gosselin, K. (2013). Flipping the classroom to improve student performance and satisfaction. *The Journal of Nursing Education*, 52(10), 1-3.
- Mohamed Amin Embi, Supyan Hussin, & Ebrahim Panah. (2014). Flipped learning readiness among graduate and postgraduate students in UKM. In Mohamed Amin Embi (Ed.), *Blended & flipped learning: Case studies in Malaysian HEIs.* (pp. 209-223). Centre for Teaching & Learning Technologies, Universiti Kebangsaan Malaysia & Department of Higher Education, Ministry of Education Malaysia.
- Mohamed Amin Embi. (Ed.) (2011a). *E-learning in Malaysian higher education institutions: Status, trends and challenges.* Selangor: Ministry of Higher Education Malaysia.
- Mohamed Amin Embi, & Ebrahim Panah. (2014). Overview of Flipped Learning. In Mohamed Amin Embi (Ed.), *Blended & flipped learning: Case studies in Malaysian HEIs.* (pp. 197-206). Centre for Teaching & Learning Technologies, Universiti Kebangsaan Malaysia & Department of Higher Education, Ministry of Education Malaysia.
- Mohd Ariffuddin Abdul Aziz, Othman Talib, Tajularipin Sulaiman, & Nurzatulshima Kamarudin. (2019). The Implementation of Flipped Classroom Instructional to Enhance Academic Achievement among form Four Chemistry Students. *International Journal of Academic Research in Business and Social Sciences*, 9(7), 967–980. https://doi.org/10.6007/ijarbss/v9-i7/6195
- Mohd Zamri Abdullah, & Mustafa Mamat. (2018). The effects of Flipped Classroom instructions on student's motivation in Algebraic Component. In *Jurnal Pendidikan Sains Dan Matematik Malaysia* (Vol. 8, Issue 2, pp. 10–26). https://doi.org/10.37134/jpsmm.vol8.2.2.2018

- Najjari, R. (2014). Implementation of Task-based Language Teaching in Iran: Theoretical and Practical Considerations. *Procedia Social and Behavioral Sciences*, 98(2014) 1307 1315. doi:10.1016/j. sbspro.2014.03.547
- Nanclares, N. H. & Rodríguez, M.P. (2016). Students' Satisfaction with a Blended Instructional Design: The Potential of "Flipped Classroom" in Higher Education. *Journal of Interactive Media in Education*, 2016(1), 4, 1–12. doi: http://dx.doi.org/10.5334/jime.397
- Nederveld, A., & Berge, Z.L. (2015). Flipped learning in the workplace. *Journal of Workplace Learning*, 27(2),162-172. doi: 10.1108/JWL-06-2014-0044.
- Neo, M. (2004.) Cooperative learning on the web: A group based, student centred learning experience in the Malaysian classroom. *Australasian Journal of Educational Technology*, 20(2), 171–190. Retrieved from: http://www.ascilite.org.au/ajet/ajet20/neo.html.
- Nie, Y. (2015). Influence of flipped classroom on learner's empowerment-a study based on English writing courses in China. *Journal of Literature, Languages and Linguistics*, 12, 1-7.
- Nielsen, L. (2012). Five reasons I'm not flipping over the flipped classroom. *Technology & Learning*, 32(10), 46-46.
- Noor Hisham Jalani, & Lai, C.S. (2015). The Example-Problem Based Learning Model: Applying Cognitive Load Theory. *Procedia Social and Behavioral Sciences*, 195, 872-880.
- Normazidah Che Musa, Koo, Y. L., & Hazita Azman (2012). Exploring English Language Learning and Teaching in Malaysia. *GEMA Online Journal of LanguageStudies*, 12,33-51. Available: http://www.ukm.my/ppbl/Gema/GEMA%20vol%2012%20(1)%20Special%2 0section%202012/pp 35 51.pdf
- Novak, G. M. (2011). Just-in-time teaching. *New Directions for Teaching and Learning*, 2011(128), 63-73.
- Nunan, D. (1989). *Designing Tasks for the Communicative Classroom*. New York: Cambridge University Press.
- O'Flaherty, J., & Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. *The Internet and Higher Education*, 25, 85-95.

- Radzuwan AB Rashid, Shireena Basree Abdul Rahman, & Kamariah Yunus. (2017). Reforms in the policy of English language teaching in Malaysia. *Policy Futures in Education*, 15(1), 100–112. doi: 10.1177/1478210316679069
- Raihanah M. Mydin. (2014). Flipped Classroom & Meaningful Learning Among UKM Graduate Students: A Teacher's Reflection. In Mohamed Amin Embi (Ed.), Blended & flipped learning: Case studies in Malaysian HEIs. (pp. 277-296). Centre for Teaching & Learning Technologies, Universiti Kebangsaan Malaysia & Department of Higher Education, Ministry of Education Malaysia.
- Ramiza Darmi, & Albion, P. (2013). English language in the Malaysian education system: its existence and implications. *In: 3rd Malaysian Postgraduate Conference (MPC 2013)*, 4-5 July 2013, Sydney, Australia.
- Richards, J. C., & Rodgers, T. (2001). Approaches and Methods in Language Teaching: A Description and Analysis. New York: Cambridge University Press.
- Richards, J. C. (2008). Second language teaching education today. *RELC Journal*, 39, 158-168.
- Rimm-Kaufman, S., & Sandilos, L. (2015). *Improving Students' Relationships with Teachers to Provide Essential Supports for Learning*. Retrieved from American Psychological Association website: http://www.apa.org/education/k12/relationships.aspx
- Rozinah Jamaludin, Siti Zuraidah Md Osman, Wan Mustaffa Wan Yusoff, & Nur Farrah Azwa Jasni. (2016). Flipped: A case study in fundamental of Accounting in Malaysian polytechnic. *Journal of Education and e-Learning Research*, 3(1), 23-31.
- Sakinah Zakaria, & Melor Md Yunus. (2020). Flipped classroom in improving esl primary students' tenses learning. *International Journal of English Language and Literature Studies*, 9(3), 151–160. https://doi.org/10.18488/journal.23.2020.93.151.160
- Sazilah Salam, Norasiken Bakar, Halimatussaadiah Mohd Asarani, & Siti Nor Fadilah Mohamed Saki. (2014). Designing an Interactive Book for Flipped Learning. In Mohamed Amin Embi (Ed.), *Blended & flipped learning: Case studies in Malaysian HEIs.* (pp. 300-308). Centre for Teaching & Learning Technologies, Universiti Kebangsaan Malaysia & Department of Higher Education, Ministry of Education Malaysia.

- Seery, M.K. (2010). Using Pre-Lecture Resources in Your Teaching: A Short Guide. *Journal of Chemical and Pharmaceutical Sciences, III*, 1-3.
- Selamat, J. T. (2014). Code Switching in the Malaysian ESL Classroom. (Master's thesis; University of Otago). Retrieved from https://ourarchive.otago.ac.nz/handle/10523/4909
- Sherina Shahnaz Mohamed Fauzi, & Raja Maznah Raja Hussain. (2016). Designing Instruction for Active and Reflective Learners in the Flipped Classroom. *Malaysian Journal of Learning and Instruction*, 13(Vol. 13, No. 2 Dec 2016), 147–173. https://doi.org/10.32890/mjli2016.13.2.6
- Shoba Vijaya Kumar, & Baranovich, D. L. (2018). Effectiveness of Flipped Learning on Disruptive Behaviours Among Malaysian Elementary School Students. American Scientific Publishers, 24(5), 3487–3492.
- Siti Fatimah Abd Rahman, Melor Md Yunus, & Harwati Hashim. (2019). An Overview of Flipped Learning Studies in Malaysia. *Arab World English Journal*, 10 (4), 194-203. doi: 10.24093/awej/vol10no4.15
- Siti Martini Mustapha, & Ros Aizan Yahya (2013). Communicative language teaching (CLT) in Malaysian context: its implementation in selected community colleges. *Procedia Social and Behavioural Sciences*, 90, 788- 794. doi: 10.1016/j.sbspro.2013.07.153
- Siti Sukainah Che Mat, & Melor Md. Yunus. (2014). Attitudes and Motivation Towards Learning English Among FELDA School Students. *Aust. J. Basic & Appl. Sci.*, 8(5), 1-8, 2014.
- Siti Zuraidah Md Osman, Rozinah Jamaludin, & Nur Eliza Mokhtar. (2014). Flipped classroom and traditional classroom: Lecturer and student perceptions between two learning cultures, a case study at Malaysian polytechnic. *International Education Research*, 2(4), 16–25. doi: 10.12735/ier.v2i4p16
- Sung, K. (2015). A case study on a flipped classroom in an EFL content course. Multimedia-Assisted Language Learning, 18(2), 159-187.
- Sweller, J. (2005). The redundancy principle in multimedia learning. In R. E. Mayer (Ed.), *Cambridge handbook of multimedia learning* (pp. 159–167). Cambridge, UK: Cambridge University Press.
- Sweller, J., van Merriënboer, J. J. G., & Paas, F. (1998). Cognitive architecture and instructional design. *Educational Psychology Review*, 10,251-296.

- Sweller, J. (1994). Cognitive load theory, learning difficulty and instructional design. *Learning and Instruction*, *4*, 295–312.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257–285.
- Teo, W. C., & Ramesh Sathappan. (2018). The effectiveness of using Flipped Classroom Approach to teach adjectives to Malaysian Year 4 Chinese ESL learners. The English Teacher, 47, 53–63. Covill,
- Tetreault, P.L. (2013). *The Flipped Classroom: Cultivating student engagement* (Master's thesis, Simon Fraser University). Retrieved from https://pdfs.semanticscholar.org/0229/482b3f5a277ad8f2496f38cc2965d4730 126.pdf
- Threlkeld, H.D. (2017). Flipped Learning: Understanding the Flipped Classroom through the student experience (Master's thesis, University of Oslo). Retrieved from https://www.duo.uio.no/handle/10852/58437
- Too, W. K. (2017). English language teaching and policies at the tertiary level in Malaysia. In. E. S. Park, & B. Spolsky (Eds.). *English education at the tertiary level in Asia* (pp. 109-129). Abingdon: Routledge.
- Touchton, M. (2015). Flipping the classroom and student performance in advanced statistics: Evidence from a quasi-experiment. *Journal of Political Science Education*, 11(1), 28-44. doi: 10.1080/15512169.2014.985105
- Umawathy Techanamurthy, Norlidah Alias, & Dewitt, D. (2015). Problem-Solving Skills In Tvet: Current Practices Among Culinary Arts Instructors In Community Colleges In Malaysia. Paper presented at the International Educational Technology Conference, IETC 2015, Istanbul, Turkey. (Non-ISI/Non-SCOPUS)
- Wambugu, P.W., & Changeiywo, J.M. (2008). Effects of Mastery Learning Approach on Secondary School Students" Physics Achievement, *Eurasia Journal of Mathematics, Science & Technology Education*, 4(3), 293-302
- Webb, M., Pussey, E., & Doman, K. (2014). Flipping a Chinese university EFL course: What students and teachers think of the model. *The Journal of Asia TEFL*, 11(4), 53-87.
- Yarbro, J., Arfstrom, K.M., McKngiht, K., & McKnight, P. (2014). *Extension of a Review of Flipped Learning*. Retrieved from: https://flippedlearning.org/wp-

- content/uploads/2016/07/Extension-of-FLipped-Learning-LIt-Review-June-2014.pdf
- Zainuddin, Z., & Attaran, M. (2015). Malaysian students' perceptions of flipped classroom: A case study. *Innovation in Education and TeachingInternational*, 53(6), 660-670. doi: 10.1080/14703297.2015.1102079
- Zappe, S., Leicht, R., Messner, J., Litzinger, T., & Lee, H. W. (2009). "Flipping" the classroom to explore active learning in a large undergraduate course. *In Proceedings of the 2009 American Society for Engineering Education Annual Conference and Exhibition*. Austin, TX: ASEE.
- Zhai, X., Gu, J., Liu, H., Liang, J.-C., & Tsai, C.-C. (2017). An Experiential Learning Perspective on Students' Satisfaction Model in a Flipped Classroom Context. *Educational Technology & Society, 20* (1), 198–210.
- Zuber, W. J. (2016). The flipped classroom, a review of the literature. *Industrial and Commercial Training*, 48(2), 97 103. doi: 10.1108/ICT-05-2015-0039