Students'Attitude of Flipped Classroom Model in Online Learning Classrooms

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ABSTRACT

Flipped Classroom Model was introduced in 2016 and since then it has been adopted in many classrooms in most Malaysian institutions. It is described as an innovative strategy used in higher education, tremendously beneficial in a pandemic, demanding students to develop their critical thinking and problem-solving skills. This study was conducted in order to investigate students' attitude towards the implementation of Flipped Classroom and to examine students' engagement in a Flipped Online Classroom. 15 Foundation students from a local university in Sepang district were selected for a focus group interview and two classes were recorded and observed. A checklist on Components of Attitude was used. There were three components that were observed which are Cognitive, Affective and Behavioral. Through these instruments, the current study showed that the students' attitude towards Flipped Classroom Model in online learning classroom was positive. Not only that, students also showed positive engagement in terms of Cognitive, Affective and Behavioral. The students viewed Flipped Classroom as a useful, productive, interactive and entertaining learning approach. This study recommends the necessity of using Flipped Classroom Model in face-to-face, online or even hybrid teaching for other suitable subjects due to its flexibility and convenience, encouraging independent learning and enhancing learning interest.

1. INTRODUCTION

Educators around the world are now adopting technology and education into their classrooms due to Covid-19. It has been mentioned that it brings a myriad of benefits to the educators and students, however, one must admit that not everyone will get the best out of the situation.

The use of technology in education becomes more valuable when time passes by, and some might say compulsory. Wang & Reeves (2006) received results from an interview conducted for students, stated that technology is one of the sources of motivation in learning. Hoffman (2022) also shared that the integration of student-centered technologies has not only resulted in heightened student motivation and improved academic performance, but the use of interactive technologies has also enabled differentiated instruction, leading to increased student motivation once again.

Seeing the importance of technology into the classroom, many research have introduced new techniques and innovations. The Flipped Classroom Approach was most credited to Jonathan Bergmann and Aaron Sams who started using recorded lectures in 2006. The approach was a result of a number of experiments with the concept of blended learning and problem-based learning, introducing new teaching materials and active learning techniques to motivate and engage students (Arnold-Garza, 2014).

The Flipped Classroom Approach would create an opportunity for the students to use the time in class for discussions or practices, hence, increasing their engagement. Teachers' responsibilities are not only to deliver the lesson in class, but they should also be able to facilitate the students by constantly guiding them. According to Strayer (2012), students were able to obtain feedback immediately from the educators and as a result, they will not be demotivated to do their homework as they are confident with the attention they received in class.

These days, the main idea of teaching pedagogy is to improve students' attitude in class. In a classroom, students need to grasp the idea of the situation in the classroom in order to respond actively. This means that students' engagement in educationally effective practices, inside and outside the classroom will lead to a positive learning outcome (Trowler, 2010).

For many years, online learning has been conducted as another alternative to the physical classroom. Flipped classrooms in online learning can be conducted with the presence of two key essentials of it which are technology and task-based learning. According to Ngunyen & Hung (2022) the fundamental concept of online flipped learning is to minimize traditional direct teaching during the lesson so that collaborative group work and task-oriented learning through various activities could be done among students.

1.1 Problem Statement

Higher education, represented by universities and colleges around the world, seeks to reinforce the value of innovative thinking and the necessity of shifting from traditional classroom into new learning methods like Flipped Classroom. With the current pandemic and the implementation of open distance learning (ODL), it has been a challenge for lecturers to conduct lessons and ensure students will get the input as easily as in a traditional classroom setting. Besides that, it is also difficult to maintain or even improve students' engagement during online lectures.

In a traditional classroom setting, teachers present the contents during lectures and are responsible for transferring the knowledge. Once the knowledge has been transferred, students are expected to perform tasks or activities to strengthen the teacher's explanations (Touron & Santiago, 2015). Through this, students are able to practice problem-solving skills on their own without the help of a teacher or tutor. When this occurs on a continuous basis, the students become frustrated with the lack of guidance, which prevents the process of assimilation of the contents and the acquisition of the corresponding skills and abilities (Goodwill & Miller, 2013).

The changes that are taking place in the education field have jumped over the pandemic. It leads to a situation in which part of the knowledge and even the skills acquired by both teachers and students may become outdated in a short period of time. Sitting in online lectures for at least four hours a day can be overwhelming for a lot of students, especially when the lectures are conducted traditionally (teacher-centered learning). According to Bingimlas (2009), learners who are accustomed to face-to-face learning find online distance education to be challenging. Lack of participation, demotivation, low self-esteem are just some from many occurrences that can be seen in online lectures. Not only that, when the learning process takes place in a remote setting, there are certain constraints to consider when learning from home, including issues with internet connection, limited time availability, and inadequate device resources (Nur Hidayah et al., 2022). ESL learners, especially novice users of the language, require constant supervision and guidance in learning the grammatical rules, vocabulary and the four English skills; listening, speaking, reading and writing (Kamariah, 2015).

In order to solve this on-going issue, a new teaching style should be implemented so that the students are motivated to be behaviourally engaged in ESL classrooms. The researchers believe that students should be more positive in order to improve their performance. Learning through Flipped Classroom Approach is regarded as one of the best models since it incorporates technology, which hopefully, attracts students' interest.

1.2 Research Objectives

1. To investigate students' perceptions and attitude toward Flipped Classroom Model in Online Learning Classroom.

2. To examine students' engagement in a Flipped Online Learning Classroom.

1.3 Research Questions

1. What are students' perceptions and attitude toward Flipped Classroom Model in Online Learning Classroom?

2. How do students engage in a Flipped Online Learning Classroom?

1.4 Significance of the study

The significance of the study revolves around the importance of implementing Flipped Classroom Model. This study will help both educators and students, providing educators with different learning styles which can change how the content is taught and at the same time, motivating students to be more active in class during and after the pandemic. This may benefit both educators and students to discover their own perceptions, as well as allowing them to make improvements in the teaching and learning process to achieve their objectives in a conducive environment.

2.0 LITERATURE REVIEW

2.1 Flipped Classroom Model

A document analysis study by Ağirman & Ercoşkun to explore the history of Flipped Classroom found that the central pillar of the model is Alison King's Transmittal Method introduced in 1993 which was based on the idea of change of teacher's role from the centre of the class to the guide in the class. The idea then inspired the emergence of more 21st century learning models including Peer Instruction, Classroom Flip and Inverted Classroom. From these models, in 2007, Bergman & Sams invented Flipped Classroom for student-centered learning in classroom.
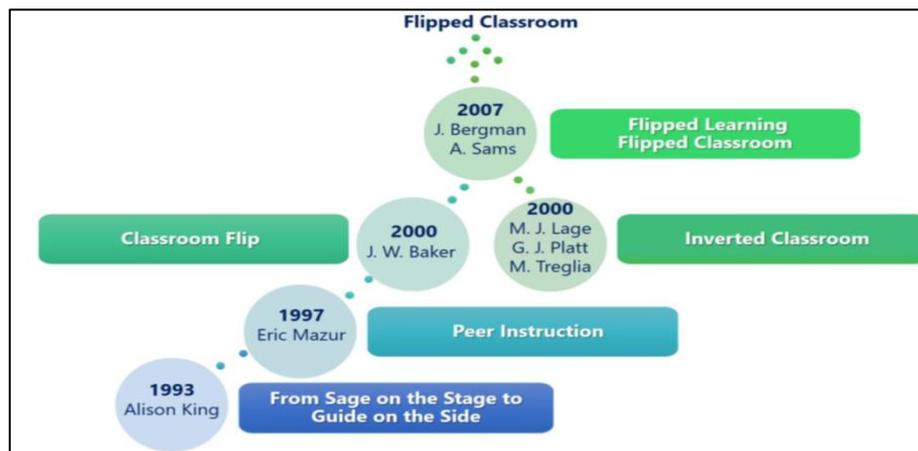

Figure 1: The Emergence Process of the Flipped Classroom Model

The Flipped Classroom Model, also referred to as inverted classroom, promotes the use of recorded lecture in the form of videos to replace live lecture (Milman, 2000). Opposite to "information delivery stage" in traditional class, the teacher can instruct the students to watch the lecture video or other relevant material to prepare themselves for the class (Kvashnina, Martynko, 2016). The main purpose of this is to replace the live lecture with more meaningful, engaging activities in classrooms (Milman, 2000). Flipped classroom is inverted in the sense that what has been normally done in traditional classroom, is now done out of the class and what has been done out of traditional classroom, is being done during the Flipped Classroom (Nouri, 2016).

Throughout 15 years after it was first invented, Flipped Classroom has become a topic of discussion in many studies and articles, discussing how it benefits education. Some of the numerous benefits of Flipped Classroom are allowing students to learn in their own pace, encouraging students' engagement, allowing the limited class time to be used for more meaningful activities, expanding teachers' opportunities to interact with the students and to promote control and responsibility of students' own learning (Gilboy, Heinerichs, & Pazzaglia, 2015; Betihavas et al., 2015, as cited in Nouri, 2016).

2.2 Students' Perceptions towards Flipped Classroom

In promoting student-centered learning, students' perception of the model is also worth discussing. A study by Nouri (2016) on students' perception of Flipped Classroom Model revealed that a great majority of the students showed positive attitude towards Flipped

Classroom, and that a positive attitude towards Flipped Classroom was strongly correlated to perceptions of increased motivation, engagement, increased learning, and effective learning.

A study conducted by Almanasef (2020) on Qualitative Investigation of the Flipped Classroom Teaching Approach as an Alternative to the Traditional Lecture discovered that this method was seen as a solution to address perceived drawbacks of traditional lectures, such as low student engagement and inadequate pacing of instruction. Additionally, it was recognized as a valuable tool for enhancing students' comprehension of the subject matter and preparing them for summative assessments. The objectives of the study were to assess students' perspectives on various teaching and learning methods they had previously encountered, including the traditional lecture format, and to examine their expectations and attitudes towards the flipped classroom teaching approach. Two separate focus group discussions were organized, involving a total of eleven undergraduate pharmacy students from two distinct pharmacy schools in the United Kingdom. These focus group sessions were recorded in audio format, transcribed verbatim and subsequently analyzed thematically using an inductive approach. Six key themes were identified; (1) Teacher characteristics and competence; (2) Having the right tools to learn; (3) Learning can be emotional; (4) Group work: what is in it for me?; (5) Scaffold the delivery of teaching; and (6) To prepare or not to prepare.

Another study by Salam Hoshang, Tariq Abu Hilal & Hasan Abu Hilal (2021) explored the perspectives of students and educators regarding the implementation of the Flipped Classroom concept. This qualitative research incorporates a range of methodologies including focus group interviews, observations, and mini-structured surveys, all designed to address the main research question concerning the views of students and educators on the Flipped Classroom approach. The research data was gathered from approximately three hundred students and around ten educators specializing in information systems and engineering disciplines. The findings showed that both students and educators possess awareness of the Flipped Classroom concept, but further training in the tools and principles of the Flipped Classroom is necessary. The research highlighted the significant benefits that can be derived from implementing Flipped Classrooms for students, institutions, and educators alike. Ultimately, the outcomes of this study demonstrate that both students and educators express a preference for the Flipped Classroom approach in certain aspects.

Based on a study conducted by Oki (2016), online learning materials in Flipped Classrooms are perceived as beneficial by students. The research suggests that students found online learning materials, such as videos, to be helpful in improving their learning experience within Flipped Classrooms. In addition, Flipped Classroom learning in an online setting is preferred over textbooks as the study indicates that the students preferred watching videos over referring to textbooks. This preference suggests that Flipped Classrooms can positively impact students' perceptions and interests. Oki (2016) also found that students reported changes in their perceptions of the topics and an increase in their interest in the topics. This implies that Flipped Classrooms in an online setting have the potential to enhance students' engagement and enthusiasm for learning.

Of all the benefits of Flipped Classroom Model, most of them seem to be more relatable in hybrid or blended learning (Milman, 2000). With the rise of COVID-19 cases, more research is needed to investigate the effectiveness of Flipped Classroom method in a fully online class.

2.3 Students' Attitudes towards Flipped Classroom

In the study conducted by Abuyarash (2021), a majority of the participants, comprising university students, demonstrated overwhelmingly positive attitudes towards the utilization of Flipped Classrooms. These favorable attitudes of the Flipped Classroom approach highlight its promising potential as a highly effective pedagogical method. The research also revealed a strong correlation between these positive attitudes and various key factors, including academic motivation, self-monitoring abilities, self-learning skills, and proficiency in self-learning writing skills.

A similar finding was revealed in a study conducted by Nja, Orim, Neji, Ukwetang, Uwe & Ideba (2022) where the Chemistry's students showed positive attitudes towards Flipped Classrooms. This positive attitude contributed to an improvement in their academic performance in the chemistry Redox reaction test where videos were used as mode of instruction. The positive impact of the Flipped Classroom on students' attitudes might also be attributed to their enjoyment of using their phones and laptops. Engaging with video content felt enjoyable, leading to a positive outlook in the Flipped Classroom. The interactive nature of classes involving smartphones brought them joy and reduced the stress associated with learning. In addition to that, it might also be attributed to the fact that students in the Flipped Classroom had already studied the learning materials at home and were prepared to apply what they had learned earlier.

2.4 Engagement in Online Learning

Many studies have been conducted to investigate students' engagement in a Flipped Classroom. A study conducted by Steen-Utheim & Foldnes (2017), a group of twelve students enrolled in a mathematics course at a higher institution in Norway underwent comprehensive interviews to explore and understand their learning experiences over a span of two semesters. The initial semester involved the implementation of a flipped classroom approach, while the subsequent semester utilized traditional lectures. In general, the students expressed a more favorable learning experience and demonstrated greater engagement in the flipped classroom setting. The findings revealed seven categories that the students specially emphasized as particularly beneficial for their learning which are commitment to peers, being recognized, feeling safe, instructor relationship, physical learning environment, learning with peers and using videos to learn new content. The study also revealed that the students' involvement in the learning process is especially noticeable when they engage in reflective activities within the flipped classroom setting.

Busebaia & John (2020) did a study to evaluate the engagement levels and academic performance of nursing students when exposed to a Flipped Classroom approach. A mixed-methods research design was employed, which also included gathering feedback and perceptions of the students regarding the flipped classroom in comparison to the existing teaching methodology. The study involved twenty-two females and four males and data collection involved a triangulation technique, utilizing checklists to observe and assess class engagement, quizzed to measure performance, and focus group interviews to gather qualitative insights. According to the findings, it was found that the participants experienced a deeper understanding of concepts, increased motivation, and enhanced confidence in learning the course material.

Online learning can take place in different formats, including fully synchronous, fully asynchronous, or blended (Fadde & Vu, 2014). Each of these formats offers different challenges

and opportunities for technological ease, time management, community, and pacing. As what has been experienced by online learners for the past two years, students may feel frustrated by the lack of physical guidance and immediate feedback that can happen in traditional classrooms. In online learning courses, especially fully asynchronous, students are responsible for their learning, which may halt their performance as they are struggling with their work pace. Besides, learning from home means there are more distractions than attending physical classes on campus.

Due to the nature of online learning, interaction between learners and educators is not the same as physical learning. Therefore, it is crucial to measure students' engagement in the classroom. According to (Hollister, Nair, Hill-Lindsay and Chukoski, (2022), students' engagement can be divided into three dimensions that have been widely acknowledged, which are behavioural, cognitive and affective. Behavioural dimension describes students' active responses in the classroom which can be seen based on their participation, persistence and positive conduct. Cognitive dimension on the other hand, indicates students' mental effort in the classroom which can be measured by their deep learning, self-regulation and understanding. Whereas affective engagement is emotional investment in the classroom which includes anything that triggers positive reaction such as peers, environment and sense of belonging (Hollister, Nair, Hill-Lindsay and Chukoski, 2022).

In order to understand factors affecting students' engagement in the classroom, there are three types of interaction in online classes that should be highlighted namely student-student interactions, student-instructor interactions and student-content interactions (Moore 1993, as cited in Hollister et.al, 2022). Student-student interactions is the most valuable interaction for students' engagement. It prevents students from being bored in the classroom and builds connection with one another. Classroom activities such as discussion boards, peer assessments promote this interaction. Next, student-instructor engagements encourages higher student engagement in online classes (Dixson, 2010; Gayton & McEwen, 2007 as cited in Martin & Bolliger, 2018). Therefore it is important for educators to always be connected with the students as it may affect students' learning outcome. Lastly student-content interactions is a learning process where content is being intellectually utilised as it will strengthen students' understanding and perspectives. Based on Abrami, Bernard, Bures, Borokhovski, and Tamim (2011), student-content interactions can be gained when students watch videos or search for information.

3.0 METHODOLOGY

This qualitative study was conducted to investigate students' attitude and to analyze students' engagement in a flipped online classroom. The main interest in qualitative approach was due to the greater emphasis on holistic description compared to other approaches. Participated in the study was a total of fifty students enrolled in the TESL Foundation Program in one of the public universities in Sepang district during the 2021/2022 academic year. Fifteen students were chosen to participate in semi-structured interviews and fifty students were observed to identify their engagement in a Flipped classroom.

To answer Research Question 1, semi-structured interviews were conducted to investigate students' perception and feedback upon the implementation of Flipped Classroom Model. Firstly, the researchers called for volunteers to participate in the interview. The participants were divided into two sessions as the researcher wanted to ensure that each participant would have enough time to share their thoughts. The volunteers were then notified by Whatsapp on the time and date of the interview. Then, the researchers provided a Zoom Meeting link and

proceeded with the interview session. Each session took around 30-60 minutes. Upon completion, the responses were analyzed by the researchers. The instrument used was a set of open-ended questions constructed by the researchers which allowed participants to share information in their own words. The open-ended questions were, (1) How long did it take you to go through the slides? How did you prepare yourself before you join the zoom meeting?; (2) Did you feel pressured or anxious while waiting for your name to be called? Or did you feel relaxed because you have prepared and went through the slides by then?; (3) Did you notice any difference/s between traditional lectures and flipped lectures?; (4) Did it make you a better learner?; (5) Did you understand the content better?; (6) What do you like and dislike about this approach?; (7) Do you feel that this will increase students' motivation to learn Academic Writing? Or any other subjects?; (8) How did you feel after the class has ended? Did you feel the need to refer to your lecturer for further explanation?.

As for Research Question 2, a thorough observation was conducted by the researchers to identify students' engagement towards the Flipped Classroom Model. Three classroom recordings on Argumentative Essay were used, which was the final topic of the semester. This topic was chosen to ensure that the students will be able to differentiate the teaching methods between a traditional and flipped classroom setting. Videos, PowerPoint slides and other materials on Argumentative essay were given two weeks prior to the lesson. By the end of the lessons, student should be able to define Argumentative Essay, understand key terms used in an Argumentative Essay, understand and practice writing the introduction, thesis statement, developmental paragraphs and concluding paragraph using the Argumentative Essay Models and recognize the common fallacies within an argument. The flipped learning was implemented before and during the lesson where the students were required to study the materials before entering the online class. During the lesson, questions related to the topic were posed, and educators provided guidance to students throughout the activities.

A checklist was used to obtain results for Research Question 2. It was adapted from the Components of Attitude checklist, based on Wenden (1991) as cited in Samadani and Ibnian (2015) and Plato as cited in Khoir (2014). There were three components that were observed which are Cognitive (three criteria), Affective (five criteria) and Behavioural; Academic/Instructional Behaviours (three criteria) and Social Behaviours (three criteria). The data collected in this research was analysed using thematic analysis.

Thematic analysis is an approach that entails examining data with the aim of identifying themes in the data. This process is characterized by active reflection, where the researcher's subjective perspective plays a central role in interpreting and making sense of the information. The primary objective of thematic analysis is to recognize and delineate themes, which are significant patterns within the data. These themes will then later be employed to explore research questions on a particular topic (Maguire & Delahunt, 2017).

Table 1: Classroom Observation Checklist for Students's Behaviour in a Flipped Classroom

Components of Attitude	Criteria
Cognitive	1. Students like to give opinion in English during lesson. 2. Students like to ask something in English during lesson. 3. Students like to give comments and criticisms to the other friends' project
Affective	1. Students feel enthusiastic when the class is being taught. 2. Students enjoy doing activities in class. 3. Students do not get anxious when they have to answer questions in class. 4. Students feel excited when they communicate with others in doing the projects. 5. Students do not feel embarrassed to speak in front of other students
Behavioural	**Academic / Instructional Behaviours** 1. Students pay attention when the teacher is explaining the lesson. 2. Students are cooperative and follow the teacher's instructions for each task. 3. Students have organised work and work habits. **Social Behaviours** 1. Students interact appropriately with peers and the teacher in the classroom. 2. Students are friendly and respectful toward peers and the teacher. 3. Students engage with peers and the teacher in the classroom.

4.0 FINDINGS & DISCUSSIONS

4.1 Result Related to the First Research Question: What Are Students' Perceptions of Flipped Classroom Model in ESL classroom?

To answer the research question above, a focus group interview has been conducted in order to identify students' perceptions of Flipped Classroom Model. Two groups of students from two ESL classrooms were selected for the interview. A set of questions was designed by the researchers in order to seek their insights on Flipped Classroom. Not only that, the feedback also determines whether the model should be applied in traditional classrooms or vice versa.

From the feedback received through the interview, students' perceptions of Flipped Classroom Model have been identified and will be discussed based on the three major themes which are: flexibility and convenience; independent learning; and enhancement of learning interest.

4.1.1 Flexibility and Convenience

Based on the interview conducted, it can be concluded that the Flipped Classroom Model permits students to be flexible with their learning time, pace and materials. This method indirectly makes their learning process more convenient. The preparation of flipped classroom requires the students to go through the lesson or materials beforehand. As each individual has their own learning pace, this method helps the students to plan and schedule their learning time at their own convenience. For instance, some students may need longer time to understand a certain topic while some do not. Diffusively, this method saves students and educators' time as they get to proceed with their lesson accordingly. Not only that, feedback or response from the educators can be given directly if there is any misunderstanding. This statement is supported by the interview excerpts below;

Student A : In flipped classroom, I get to control my own pace, we can feel the adrenaline to give the information correctly. There are a lot of perspectives from others, so it gets everyone to get involved in the discussion. The best thing is that it clears up confusion straight away rather than waiting to ask after the class.

Student B: We get to control the pace, we feel the adrenaline to give the information correctly. Shaped us to be a better student. There are a lot of other perspectives, get everyone to get involved in the discussion. Clears up confusion straight away rather than waiting to ask after the class.

Student C: I like the fact that I can take charge of the class. Because I can finish the class earlier. Especially online classes.

Student D: In general I like it because it is not a traditional classroom. And you're calling the shots.

In addition to that, the learning materials provided are in variant formats and it could be accessed at any time. Some of the materials provided are videos, recorded lectures, lecture notes, slides and past year questions. Thus, the students are able to access any format that they prefer. For example, when watching a recorded lecture video, students can just fast forward the video and focus on the part that they are having difficulty understanding.

Student E : Increased my focus in flipped classroom, so I understand better. I actually have to read the slides and study it myself. I actually study for myself and not for the examination. Usually I just listen and refer to the recording again.

4.1.2 Independent Learning

Flipped classroom method has driven students to be independent learners. Since it requires students to be able to explain or understand the subject matter before the lesson, they have to make preparations such as going through the learning materials and trying to understand the content on their own. Eventually, it helps the students to be more confident, especially when it comes to sharing their own views and perspectives on the subject. This method is completely different from traditional classroom learning where most of the time, students will be taught and will be given time to comprehend the subject matter. Whereas in flipped classroom, content is intended to be understood without any guidance then only discussion will be held during the lesson. This is supported by the responses given below;

Student A: For flipped, it will reinforce students' focus and dedication to talk about their perspective about one topic. In a traditional classroom, it is a bit different as they have to listen and talk less. You absorb content without knowing if you understand the topic or not. Traditional classroom, you listen and understand later. In flipped you understand and listen later.

Student B: The major difference I have noticed is that I gained more knowledge and confidence in certain topics because I prepared myself before the class.

Student C: More than just skimming and scanning, led me to try my best to understand the content so I can explain well in class and to my friends. Good thing that you don't depend 100% on your lecturer.

Student D: Increased my focus in flipped classroom, so I understand better. I actually have to read the slides and study it by myself. I actually study for myself, and not for the examination.

Student E: It has made me a better learner because I prepared myself with a little bit of understanding before the class started, and then I listened to my classmates' discussion about the topic (especially when they talked about it in their own words), and I also presented the topic myself. This method has made me a better learner because instead of just listening to the lectures and sometimes not focusing in class, I was actually more focused and gained more input than usual classes.

Therefore, it can be concluded that students feel more confident when flipped classroom is applied as they know the subject matter before the lesson is being taught. They have also not depended too much on the educators as they get the chance to present their views first before it's being discussed or taught later in the classroom. In addition to that, the learning experience will become more meaningful as the students are able to reflect and do comparison on what they have understood with what has been taught.

4.1.3 Enhancement of Learning Interest

Based on the data collected, students' learning interest has been escalated when flipped learning is applied in the classroom. As aforementioned, flipped learning requires students to be readied with the subject matter before being taught. Thus, some students perceive it to be something challenging as it is not something customary in the teaching and learning process. However, this challenge is taken positively as it has helped the students to put more effort into comprehending the subject matter. Besides that, flipped learning has allowed students to share their views and thoughts with their classmates in a simplified way as they have to explain and help their classmates understand the lesson in the most effective way. Eventually, it prevails the creative side of learning as well.

Student A: Traditional classes sometimes get boring because there is no interaction between lecturers and students, which makes the lecturers sad. In flipped classroom, it helped a lot in understanding the topic because my friends will have their own ways of explaining it which is different from the lecturer. For example, the usage of casual language makes it more like a conversation and is easier to understand.

Student B: I can remember all the do's and don'ts better because I'll remember my mistakes and don't want to repeat them due to embarrassment. I also managed to recall what my classmates have explained as it is simplified and corrected by my lecturer.

Student C: I like this approach because it is more challenging for myself especially when we have to present our ideas on the topic in front of the class and I also like it because I get a deeper understanding.

4.2 Result Related to the Second Research Question: How do Students Engage in a Flipped Online Classroom?

The data was collected based on students' engagmeent and behaviour in a Flipped Online Learning Classroom. There are three components that were observed which are Cognitive, Affective and Behavioural. These components were adapted from the Components of Attitide checklist, based on Wenden (1991) as cited in Samadani and Ibnian (2015) and Plato as cited in Khoir (2014). The data of engagement were analyzed using Figure 2 below. Online Flipped

Classrooms were recorded and later analyzed using the Components of Attitude Checklist. The observations were divided into three components; Cognitive, Affective and Behavioural.
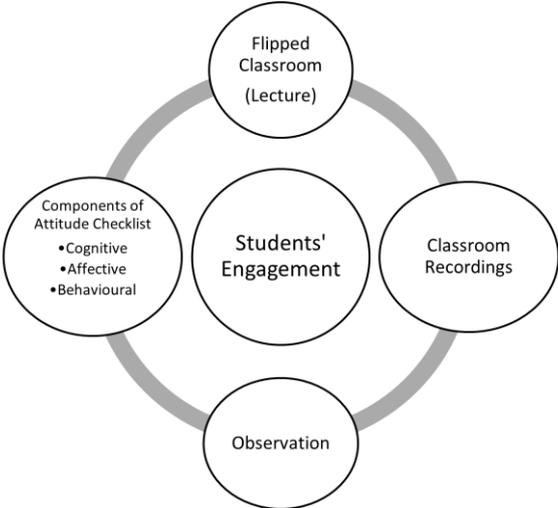
Flipped Classroom (Lecture)

Components of Attitude Checklist
•Cognitive
•Affective
•Behavioural

Students' Engagement

Classroom Recordings

Observation

Figure 2: Data Analysis Cycle

4.2.1 Cognitive

Table 2: Classroom Observation Checklist for Component of Attitude (Cognitive)

Components of Attitude	Criteria
Cognitive	1. Students like to give opinion in English during lesson. 2. Students like to ask something in English during lesson. 3. Students like to give comments and criticisms to the other friends' project

Based on the class recordings, it can be observed that the students were very active in flipped classrooms. Students were not hesitant to ask questions and provide opinions on the subject matter. During the first 15 minutes of the lesson, the consistently active students were the ones who raised the questions first, and this encouraged the usually passive students to be more engaged in the lesson. One of the significant changes that can be seen was the students' effort to volunteer to share their answers, opinions and raise arguments to other students' input. To compare it with traditional classrooms, the students were passive, and the educator had to call out their names a couple of times to get feedback. It can be concluded that flipped classrooms create a different learning environment where the students are more comfortable to discuss class content with the educator's role as a tutor.

4.2.2 Affective

Table 3: Classroom Observation Checklist for Component of Attitude (Affective)

Components of Attitude	Criteria
Affective	1. Students feel enthusiastic when the class is being taught. 2. Students enjoy doing activities in class. 3. Students do not get anxious when they have to answer questions in class. 4. Students feel excited when they communicate with others in doing the projects. 5. Students do not feel embarrassed to speak in front of other students

Based on the educator's observation, the students showed enthusiasm during the lesson as it was a different learning experience for them. The students started the semester with a Traditional Classroom Approach and were introduced to Flipped Classroom during Week 10 of the semester. This is to ensure that the students were able to differentiate the learning approaches. Not only that, the students showed eagerness to answer questions raised by the lecturer and responded with accurate and justified answers. However, there were a few who were hesitant when they were called by the lecturer to answer the question. This can be seen by how quickly the students unmute and mute themselves throughout the lesson conducted via Zoom. Aside from that, majority of the students did not feel embarrassed to express their thoughts about the topic discussed.

4.2.3 Behavioral

Table 4: Classroom Observation Checklist for Component of Attitude (Behavioral)

Components of Attitude	Criteria
Behavioural	**Academic / Instructional Behaviours** 1. Students pay attention when the teacher is explaining the lesson. 2. Students are cooperative and follow the teacher's instructions for each task. 3. Students have organised work and work habits. **Social Behaviours** 1. Students interact appropriately with peers and the teacher in the classroom. 2. Students are friendly and respectful toward peers and the teacher. 3. Students engage with peers and the teacher in the classroom.

There are two parts under this subtopic. The first part focuses on the students' academic or instructional behaviour in the online classroom. All of the students were paying attention to the lecturer's instructions and to their classmates' responses. The class was able to be conducted efficiently where there was no disruptive behaviour shown throughout the lesson. Everyone was being respectful by allowing their classmates to speak their mind and only interrupt after they were done. Not only that, the students showed impressive learning habits based on students' performance.

Another criteria focuses on the social behavior among the students in the classroom. The students showed appropriate interaction between their classmates and the lecturer. Besides that, the researcher observed that during a flipped classroom lesson, the students showed how friendly and respectful they are between each other, something that the researcher never seen in previous lessons. The students took turns while discussing without interrupting the lesson where it creates a two-way communication.

5.0 CONCLUSION

Following the implementation of the Flipped Classroom Model in online learning, the results in terms of students' perception have been very positive. For students, the methodology used in this model is useful, productive, interactive and entertaining. Majority of the students agreed that this model should be implemented into other subjects as well. As it is a new and innovative approach in their learning experience, Flipped Classroom Model has engaged the students' interest in learning. Most importantly, this has consequently increased their motivation to learn in an online classroom. These results agree with the contributions made by Nouri (2016), where the writer discovered that students showed a positive attitude towards the Flipped Classroom Model and it was associated with perceptions of increased motivation, engagement, increased learning, and effective learning. This is also consistent with the findings from Salam Hoshang, Tariq Abu Hilal & Hasan Abu Hilal (2021) where they explored the perspectives of students and educators regarding the implementation of the Flipped Classroom concept in which both students and educators expressed a preference for the Flipped Classroom approach in certain aspects. Not only that, a study conducted by Abuyarash (2021) also highlighted positive attitude in the implementation of Flipped Classrooms.

Regarding students' engagement in lectures, the findings showed a positive result as the students in the class portrayed excellent behavior throughout the hours they spent learning in a Flipped Classroom. This is aligned with the findings from Steen-Utheim & Foldnes (2017) where the students expressed a more favorable learning experience and demonstrated greater engagement in the Flipped Classroom setting. Not only that, Busebaia & John (2020) discovered that students received a myriad of benefits in learning through the engagement levels experienced in Flipped Classrooms.

This study recommends that Flipped Classroom Model should be applied and adopted in the teaching process of students of higher education institutions. Future researchers may also adapt the flipped classroom approach and identify its effectiveness by analyzing students' academic performance. However, researchers should be mindful of certain limitations while conducting studies on the Flipped Classroom and Virtual Flipped Classroom approaches which may cover the issues on network connectivity, class duration and real-time feedback. It is recommended to implement the Flipped Classroom approach in smaller groups with support from both educators and students, and potentially incorporating hybrid classes as well.

AUTHORS' CONTRIBUTION

All authors took part in the process of completing and refining the manuscript. NHM carried out the introduction and NFAK wrote literature review. NHM also contributed in the literature review and methodology. NHM was in charge of heading the data collection process and FAMR and NFAK were in charge of analysing the data. NHM, FAMR and NFAK helped out in refining the overall manuscript and helped out in refining the overall manuscript including the content structure and language. All authors read and approved the manuscript.

CONFLICT OF INTEREST

None declared

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