

ASSESSING FACTORS ON FLIPPED CLASSROOM PRACTICE: A CONCEPTUAL FRAMEWORK

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Abstract: *Recently, lecturers have been required by the educational system to use more blended learning and to encourage students to learn more independently rather than through more conventional teaching and learning techniques. In the flipped classroom, a novel method of instruction and learning, students watch a video lesson via distance learning outside of class and engage in practical activities in that same class. The purpose of this study was to investigate whether three independent variables which are student motivation, student-content interaction, and students' engagement in the practice of flipped classrooms. Literature and previous study will develop a conceptual framework. This approach is an asynchronous learning time for students to continue their learning and communicate with their respective lecturers outside of the classroom. The research will concentrate on the second type of blended learning used at UiTM Campus Kota Bharu. The study will employ the descriptive research method and will be carried out at higher learning institutions that participated in online distance learning during Covid 19. The data was sampled using simple random sampling. This study's population focuses on students enrolled at UiTM Campus Kota Bharu. The results could provide some opportunities and flexibilities to teachers or facilitators to diversify teaching methods and make learning methods interesting and fun for students*

Keywords: *Blended Learning, Student Motivation, Student-Content Interaction, Students' Engagement, Flipped Classroom*

Introduction

Technology has been adopted as a medium in the learning process. Oktaviani & Desiarti, (2019) mentioned that using Web 2.0 technology in education can help to build professional relationships by collaborating, coaching, and mentoring for social interactions and idea sharing. Living in the digital age necessitates those students work independently and collaboratively before entering the classroom, utilizing various technology tools.

According to the Horizon Report, education in the flipped classroom has been identified as an emerging technology for higher education that is critical to use at the university level. (Fang et al., 2022). It is consistent with today's students, the majority of whom are Generation Y. This generation is known as the Echo Boomers or Millennials. The characteristics of Gen Y basically are technology savvy (Agrawal, 2022). As previously stated, the way Gen Y learns may differ due to the rapid expansion of Cable TV channels, satellite radio, the Internet, e-zines, and other media. As a result, the lecturer or facilitator should be concerned that their learning style may differ from that of previous generations. This will have an impact on students' and lecturers' methods of teaching and learning.

The flipped classroom is a new approach to teaching and learning in which students watch a video lesson outside of class via distance learning and participate in hands-on activities in class (Zainuddin & Perera, 2019). The flipped classroom, also known as the reverse classroom, is a type of blended learning that combines face-to-face learning in the classroom through group discussions with distance learning outside the classroom through asynchronous video lessons and online collaboration.

While blended learning is simply defined as the activity of teaching and learning which combined face-to-face physical activities with online learning. Regarding to Hrastinski, (2019), blended learning was practiced by combining face-to-face and distance teaching and learning, or by integrating both distance and face-to-face delivery modalities. This may differ slightly in a flipped classroom. The flipped classroom is also known as a student-centered approach to learning because students are more active in the classroom than the instructor. In this case, the instructor serves as a facilitator, motivating, guiding, and providing feedback on student performance (Zainuddin & Halili, 2016).

In recent years, the education system has required lecturers to engage in more blended learning and to encourage students to learn more on their own time rather than through traditional methods of teaching and learning. Coping with the mission and vision of the organization which required lecturers to enhance their skills with technology (Agrawal, 2022; Hrastinski, 2019). The flipped classroom is a new method of learning in which technology is used to move classroom lectures into rich media and face-to-face classroom time is used for interactive learning. Traditionally, in Higher Education, the lecturer will prepare materials prior to going to the classes to facilitate learning. Students must attend class, and it is extremely difficult to assess students' understanding when there is little interaction in the classroom. Thus, a few eager and eager faces making good eye contact can persuade the teacher that everyone has understood when, in fact, only a few have done (Naziman et al., 2018).

The debate centres on the usefulness of class time for teaching, delivering information, or providing direct instruction. In Higher Education, the lecture or tutorial class has always focused on students being active in applying or discussing previously acquired knowledge. The

question may be whether the flipped classroom will benefit the learning system because Gen Y learns differently than the older generation?

Meanwhile, traditional learning tends to produce a low level of student engagement, and students often pay less attention to the subjects they learn (Deng et al., 2020). It should also be noted that traditional classroom activities focus on textbooks and lecture talks; students are often disengaged in their learning activities. As a result, students who are disengaged from learning will exhibit negative behaviours such as boredom, restlessness, and disruptive behaviour (Zawodniak et al., 2021). Other studies explain that Many studies lack the use of learning log data to validate remote teaching in schools (Kuromiya et al., 2022).

According to the i-Learn Centre, in collaboration with the Academic Affairs Division, the Blended Learning concept was introduced to UiTM students and lecturers in 2009, and it is currently scheduled to be implemented as of Covid 19. The project includes lecturers and students from both the main and branch campuses. As part of the effort to overcome the pressing issue of space constraints, the face-to-face lecture session is incorporated or blended with the online tutorial session. The lecture session is held as usual, but the tutorial is converted into an e-tutorial with the same weightage.

In general, there are two blended learning initiatives. The first is the conversion of suitable course tutorial sessions into e-tutorials. This type of Blended Learning in UiTM is available in three different time distribution models: 50:50, 60:40, and 70:30. The first model implies that lecturers spend 50% of their time handling face-to-face sessions and 50% of their time handling online sessions. The second model depicts lecturers spending 60% of their total time handling face-to-face sessions and 40% handling online, and the same goes for the 70:30 ratio. This gives lecturers the freedom to familiarise themselves with the blended approach while also organising their time according to the model that best suits them.

The second type of blended learning does not replace the tutorial session, but rather extends the students' learning time. This approach is an asynchronous learning time for students to continue their learning and communicate with their respective lecturers outside of the classroom. The research will concentrate on the second type of blended learning used at UiTM Campus Kota Bharu.

Literature Review

The Practice of Flipped Classroom

Recently, many researcher discussing about flipped classroom activities (online and face to face) are focussed more on the production of videos for online use than on the interactive activities which are meant to build extra value in the classroom (Green, 2015; Lo & Hew, 2017).

This technique become popularizes since Bergmann and Sams in 2012 introduced it (Bergmann, 2012). Since then, a plethora of software has been introduced and is user-friendly to be available in the market, allowing users such as lecturers to easily create and edit video. Students or Generation Y can easily learn and study using YouTube.com, which is simple to use and understand (Zhang, 2006). This researcher discovered that using videos to deliver lessons will be more effective. While another researcher notes that high-quality video lectures are rated higher by students than original videos created by teaching staff, this is a likely area

for investment and more effective tagging and sharing of Open Educational Resources (Galatsopoulou et al., 2022; Förster et al., 2022).

Student Motivation.

Motivation is an inner power that pushes humans to take an action or move toward a goal (Harmon-Jones, 2013; (Toffler, 2022). Students' motivation is defined as a spirit, initiative, and willingness of students to attend and learn material and in education, motivation is acknowledged as one of the most crucial elements which support students' performance and achievement. (Cole, 2004; (Spires et al., 2022).

According to self-determination theory, students' motivation is distinguished into two main types: intrinsic and extrinsic motivation (Abeysekera, 2014; Howard et al., 2021). Intrinsic motivation refers to those actions that individuals engage in as they are inherently interesting, fun, exciting, and enjoyable, while extrinsic motivation refers to individuals engaging in actions because they lead to reward or to avoid punishments (Deci, 2002; Malinauskas & Pozeriene, 2020). Likewise, this analysis showed that the flipped classroom has promoted students' empowerment, development, and ability to learn independently or at their own pace (Telford & Senior, 2017; Sultan, 2018)

The flipped classroom's success depends upon students undertaking substantial homework—and being encouraged to do by their own (Kim, 2014; Webb & Doman, 2020). Many studies showed that the impact of applying the flipped classroom was to increase students' motivation in relation to learning activities (Zainuddin & Halili, 2016). For example, that students were able to learn based on simulated learning and that they were motivated to learn at their own pace; they also noted that the students wished to recommend the flipped classroom to their other friends (Davies et al., 2013; Lin & Gao, 2020).

The flipped classroom also increases self-perceived knowledge or self-efficacy in independent learning (Zainuddin & Halili, 2016) mentioned that the strategy of the flipped learning approach will foster students' motivation in further learning. Using the flipped classroom method, students be able to work at their own pace (Santos & Serpa, 2020). Therefore, it is to be likely that the implementation of the flipped classroom will be reasonable and needed to enhance their motivation.

Student-Content Interaction

According to (Moore, 1989), three fundamental interactions should be established for successful teaching-learning with technology-based learning: student-content interaction, student-teacher interaction and student-student interaction (Van Den BERG, 2020). Other studies also suggested that student-interface interaction or interaction with technology tools as the fourth interaction to complete Moore's concept (Alhih et al., 2017). All of these interactions are critical components of the flipped classroom approach, in which technology is used as a media to relearn and interact outside of the classroom.

Although video and online platforms are important tools in flipped classroom practise, instructors should not overlook other important factors that influence students' successful learning, such as student interaction, motivation, and engagement. Another positive impact of a flipped classroom environment is student interaction, whether in the classroom or outside of the campus learning system. Students' interaction refers to students' interactions with all elements of the learning environment, such as the instructor, students, and content (Abou-Khalil

et al., 2021). It demonstrates that students' social interaction in a technology-enhanced learning environment is more effective than in a traditional classroom without technology; students in traditional classrooms interact physically in the classroom but not outside of class hours (Hebebcı et al., 2020). It can be assumed that students' social interactions will increase when technology media is integrated in teaching-learning activities. Technology use will indeed help students interact easily with all communities both inside and outside the class.

According to previous research, students reacted positively to flipping the classroom because the instruction helped them collaborate with one another to solve problems (Røe et al., 2019). The flipped classroom enabled students to build a learning community and exchange ideas to solve problems (Le Roux & Nagel, 2018). But somehow, this researcher concluded that uploading materials online was not enough for online teaching because it lacks student-teachers interaction (Nuere & De Miguel, 2021).

There are the different between traditional and flipped style learning which brought to come out with the students have a significant perception of the flipped learning approach (Ramnanan & Pound, 2017). Another study mentioned that students can enrich the dialogue with their friends both inside and outside the class because the activity of teaching-learning in a flipped classroom is not just limited to behind the classroom wall (McLaughlin et al., 2013). Also, reported that 75 students (64%) in flipped learning class increased their interactions with the instructor and classmates (Hung, 2015).

Students' Engagement

The goal of flipped learning, according to most researchers, is to engage students in active learning. Students' engagement refers to active learning or the desire of students to actively participate in routine class activities such as submitting homework, listening to the topic, working on what the instructor asks them to do, and actively attending the class (Yang & Chen, 2007). Likewise, Engagement is often seen as a multidimensional construct and a large body of research is based on the definition of its three components: *Behavioral engagement*, *Emotional engagement* and *Cognitive engagement* (Fredricks et al., 2004).

Several studies found that students used the flipped classroom. Other researchers, on the other hand, reported that students were able to prepare for in-class activities by studying and exploring online learning materials (e.g., online video lectures) prior to arriving at class (Kim et al., 2014). Students felt confident when learning in the class because they had already prepared the lesson before coming to class. (Talley & Scherer, 2013) implementing the flipped classroom, students were able to confidently produce a summary of the biological process in their own words and be active in class. Other researchers mentioned students' confidence—if they interact with asynchronous video lectures outside of class, they may be more confident and prepared to participate in class discussions. (Kim et al., 2014). Students can enhance their engagement in classroom activity, participate in discussions, exchange ideas, and solve problems with their peers (McLaughlin et al., 2013). The use of the flipped classroom also promotes students' empowerment, development, engagement, and critical thinking. While, other studies reported that the students engage the learning environment and engaged in the learning process (Hung, 2015). This also supported that students participated and engaged in discussions in class, and they were confident in their ability to apply the knowledge (McLaughlin et al., 2013).

According to the findings, the flipped classroom learning approach has been successfully implemented to better engage students in understanding various subjects. However, traditional classes without flipping produce a disengaged learning environment because this traditional learning model has some flaws. For example, teaching and learning activities tend to focus solely on text books and lectures, and students are disengaged in active learning due to a lack of time to express their abilities or performances in class.

Proposed Conceptual Framework

There are three independent variables which are the student motivation, student-content interaction and students' engagement while practice of flipped classroom is used as dependent variables.

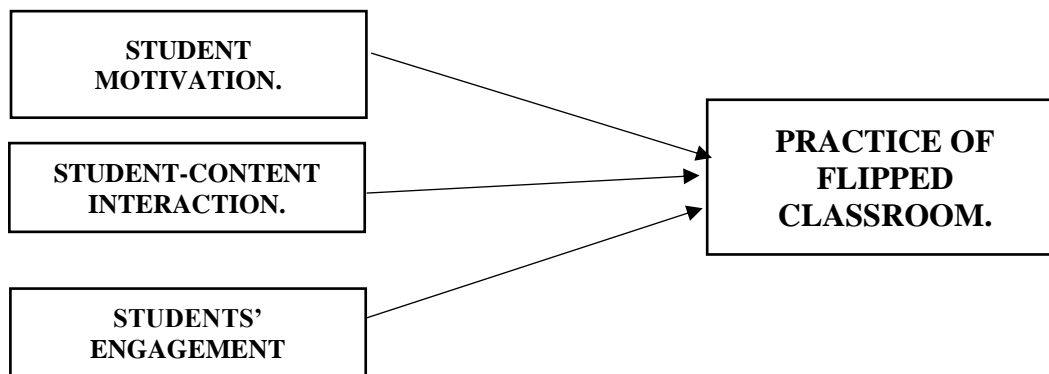


Figure 1: Proposed Framework

Hypothesis Development

- H1: There is a positive relationship between the student motivation and practice of flipped classroom.
- H2: There is a positive relationship between student- content interaction and practice of flipped classroom.
- H3: There is a positive relationship between student's engagement and practice of flipped classroom.

Methodology

The study will employ the descriptive research method and will be carried out at higher learning institutions that participated in online distance learning during Covid 19. The data was sampled using sample random sampling. This study's population focuses on students enrolled at UiTM Campus Kota Bharu. The structured questionnaire will be used by the researcher and will be divided into five sections, including a demographic section. The quantitative study will be conducted by the researcher, and the research findings will be analysed. To test the hypothesis, the study will examine normality tests, data cleaning, reliability tests, descriptive and frequency analysis, Pearson correlation, and Multiple Regression. Apparently, the expected outcome will be used to recommend in order to have a better understanding in student learning, particularly in using technology in line with the use of E-content in the student learning system.

Conclusion

Even though the pandemic gradually faded, the method or technique is still relevant when the students are ready and get used to online distance learning. Meanwhile, the results could provide some opportunities and flexibilities to teachers or facilitators to diversify teaching methods and make learning methods interesting and fun for students. Furthermore, if the results show that there is contribution to the online learning system, top management should be able to plan strategically for the semester.

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