

Behind Sarawak's ESL Flipped Classroom: Teachers' Perceptions and Its Hurdles

Sylvia Thomas, Parilah Mohd Shah

Abstract— Flipped classroom approach is design for teachers to get students prepare for the lesson before coming to class which allow pupils to take full control of their learning outside the classroom. It is a student-centered approach that integrates digital technology for teaching and learning purposes. This study was designed to investigate teachers' perceptions on ESL flipped classroom and the hurdles that they had encountered. Therefore, this study had taken place specifically in Sarawak among 71 (n=71) ESL primary school teachers with quantitative study as the research design and survey questionnaire was used as the instrument which was adapted from Aisyah et al. (2018). The findings suggested that respondents have positive perceptions towards the flipped classroom approach. Majority of respondents believe students would gain benefits in various aspects such as increase in responsibilities, discipline, participation, communication and confidence level. The second findings suggested that respondents' main hurdles and obstacles of the ESL flipped classroom are lack of facilities, lack of students' readiness and time constraints. This study is significant to shine light on the potential use of this approach into our curriculum especially in Sarawak.

Index Terms— ESL context, flipped classroom, teachers' perceptions, hurdles.

I. INTRODUCTION

It is agreed upon the statement that digital tsunami has hit the education sector worldwide as to stay relevant with the global transformation. Considering that changes in knowledge and technologies are rapid, education also moves at the same rate by continues its development with innovative learning approaches. These changes and transformation in education gives rise to flipped classroom approach. According to Bristol [7] as cited in Ozdamil & Asiksoy [40] the aim of a flipped classroom approach is to prepare students for a subject or topic before they come physically for the course. In addition, this approach increases face to face or in class activities' qualities.

In 2013, our Ministry of Education (MOE) had launched the Malaysia Education Blueprint to define the course of education reform over the next decade and had identified ICT for education to be one of the most capital intensive investments. The Ministry had aligned three waves of roadmaps to get in control of ICT for learning including enhancing teachers and Ministry officials to be ICT literate. New methods and approaches to teaching and learning such as the flipped classroom approach has been introduced to

teachers and students during the second wave of the roadmap (2016-2019). Flipped learning is designed for teachers to get students prepare for the lesson before coming to class and it allows students to empower autonomy in learning [1]. Students were usually given a task digitally, or watch recorded clips and videos about their upcoming lesson content prepared by the teacher itself through various forms of digital technology.

In the actual classroom, teachers will act as mentor to students together with developing better relationship between peers as a result of cooperation and collaboration in class [12]. As flipped learning approach is one of the key concepts of 21st century learning, teachers' attitudes and perceptions on this particular approach could make or break the Ministry's overall education aspiration. It is supported by Shah [43] the success of ICT integration in teaching and learning process is "highly dependent on the preparation and attitudes of teachers". Therefore, this study serves as a platform to find out the perceptions towards flipped classroom approach among ESL teachers focusing on those currently teaching primary school in Sarawak. This study was also conducted to investigate the hurdles that were encountered in ESL flipped classroom approach among ESL teachers who are serving the primary school in Sarawak.

II. LITERATURE REVIEW

A. Flipped Classroom Approach

Bishop and Verleger [6] defined flipped classroom approach as having combinations of "interactive group learning activities happening in the classroom and direct computer based individual instruction outside the classroom". This approach incorporates theories and methods such as learning styles, peer-assisted and collaborative learning, cooperative learning, problem-based learning and active-learning.

Learning styles theories suggest all students have unique learning styles and the integration of learning experiences with particular learning styles improve learning. Kolb's experiential learning theory [11] is particularly true in the flipped classroom approach as this theory is represented by four stages of learning cycle: concrete experience, reflective observation, abstract conceptualisation and active experimentation. McLeod [34] mentioned that effective learning occur through cycle of four stages: having concrete experience followed by observation and reflection of experience which leads to analysis and generalizations of conclusion which are then used to test hypothesis thus resulting in new experiences.

Peer assisted learning model by Topping and Ehly [25] define peer assisted learning as the acquisition of knowledge and

Sylvia Thomas, Universiti Kebangsaan Malaysia, 43600, Bangi, Selangor, Malaysia

Parilah Mohd Shah, Associate Professor Dr.)Universiti Kebangsaan Malaysia, 43600, Bangi, Selangor, Malaysia

skills through the help and support among status equals or matched companions. Flipped classroom approach fuse this model by involving students to actively assist and support others in learning through peer tutoring, peer assessment and peer modeling. On top of that, cooperative learning makes up successful flipped learning. Foot and Howe [19] describe cooperative learning into three parts. First, students work in team to achieve target goals followed by labor is divided among team members, such that each member takes accountability for different sub-target goals and thirdly, individual contributions are gathered into a composite product to ensure target goal is achieved.

Flipped classroom approach integrates problem based learning (PBL) during the in-class sessions as to engage students in learning. Instead of having students to parrot information, PBL give the opportunity to students to demonstrate their understanding of the material. Besides, PBL build students to think critically and became self-directed learners. According to Hmelo-Silver [10] PBL helps students to achieve flexible knowledge, effective problem solving skills, self-directed learning skills, and effective collaboration skills followed by intrinsic motivation. Active learning is essential in this approach as students create meaningful knowledge on their own and they learn best when they interact actively with concrete materials.

A study conducted by Carlisle [8] among undergraduate students in a computer course found that students in this course were well prepared coming to class and that they learn more in class as they were assigned with short videos about new topic. Pierce and Fox [42] studied undergraduate pharmacy course students whom four of their lectures were replaced with video lectures and the actual class itself was replaced with problem-solving activities. Results showed students performed better in their test questions with this format. Students also preferred flipped teaching model according to the survey executed.

Based on Goldberg, Haase, Shoukas, and Schramm [16] findings flipped a psychology course for medical students and Cole and Kritzer [9] flipped a college course, both found that students were engaged more as they felt it was a better use of class time since they were able to apply the skills in class with the presence of the instructors and learn basic concepts out of class.

In contrast, there had also been studies that show no difference in students' performance in a flipped classroom and traditional classroom. A study by O'Bannon, Lubke, Beard and Britt [37] was conducted among teacher candidates for undergraduate technology course by switching lectures to podcast. It was found that there was no significant difference in students' learning although the instructor was aware that flipped classroom did create more time for in-class activities and interaction between instructors and students. It was reported that students were not contented replacing the lecture with pod cast, but rather use it as supplemental purposes.

Research done by Jensen [24] involving undergraduate students in an introductory psychology proved that there was no difference in test scores between a traditional group lecture and flipped lectures. Students responded that they like the convenience of watching videos online, but they favor a live lecture.

B. Teacher's Perceptions and Hurdles of Flipped Classroom Approach

Shah [43] stated that attitudes, perceptions, behaviour and feelings are interlink as they would determine behaviour towards object and people they meet and influence even the relationship that exist among them.

Research done by previous researchers reported that the flipped classroom approach is challenging for instructors as it demand huge amount of required resources such as time, money and facilities. Ivala [21] reported that teachers could not maximize this approach as there were lacks of technology and technical support as well as poor classroom conditions. Increase time demand for teachers to prepare materials for both out of class and in class as well as lack of assistance demotivate teachers to make full use of this approach as they have already too much on their plate.

Kurup [27] added that lack of skills and knowledge lowers down teachers' confidence as most in-service teachers were trained in a traditional type of lecture. Furthermore, teachers face problems too in designing content and structure of their flipped classroom. Rodriguez [44] identified gaps in student understanding and the rise of free riders during group discussions. Other than that, there were cases that students did not do their part by watching the videos before coming to class or the lack of guides during the in-class sessions as there were too many number of students.

Moreover, Ivala [21] mentioned that teachers also face difficulties in assessing and evaluating students since they could not manage to find significant correlation between students' changes of learning process and flipped classroom. Lee [31] discovered that teachers use the same instruments of evaluating the flipped classroom to the traditional style classroom. These past studies truly indicate that flipped classroom approach has positively affects students and teachers in so many ways. However, little is known about the hurdles and challenges faced by primary school teachers especially in Sarawak on using the flipped classroom approach.

III. METHODOLOGY

A. Research Design

A quantitative research design was used to carry out this study. It incorporated survey questionnaire to evaluate ESL primary school teachers in Sarawak perceptions and the hurdles they faced in a flipped classroom approach. The data was collected by distributing the online questionnaire to the intended respondents through various mediums of digital applications.

B. Research Respondents

This survey research was conducted among 71 teachers teaching English in Sarawak primary school. Respondents came from three different school settings namely urban, sub-urban and rural school. The objectives and nature of the survey were explained to the respondents prior to obtain their consent. The respondents must meet the following criteria: (a) primary school teachers, (b) teaching English as a second language, and (c), working and teaching in Sarawak public schools under Malaysian Ministry of Education.

C. Instrument

The instrument used in this study was a questionnaire taken from AisyahHanum Abu Bakar, Noor AzlindaZainalAbidin, Zuraina Ali, Nursyaheedah Muhammad Isa &NorSuhardilianaSahar[1]that was adapted and adopted by the researcher. The questionnaire consisted of 17 questions and has three sections.The first section seeks information on respondents’ demographic background such as gender, years of teaching experience, school division, school setting, familiarity of using technology in the classroom and frequency of using the flipped classroom approach. The second section of the questionnaire was designed to gain information on respondents’ perceptions of the flipped classroom approach. The section consisted of 6 questions in a four point scale from strongly agree to strongly disagree. Section 3 included hurdles of a flipped classroom approach that respondents may encounter or as their personal opinion. The last section consisted of 10 questions with regard to the hurdles and obstacles that hinder the effectiveness of a flipped learning approach. Similar to section 2, section three incorporated a four point scale ranging from 1 (strongly agree) to 4 (strongly disagree).

D. Procedure

In this study, the researcher had adapted and adopted a questionnaire developed by AisyahHanum Abu Bakar, Noor AzlindaZainalAbidin, Zuraina Ali, Nursyaheedah Muhammad Isa & Nor Suhardiliana Sahar[1] on “Flipped Style Grammar Lesson Questionnaire”. The questionnaire was set up by using Google Forms application. The forms are web based and respondents or researchers can share the form created just by sharing the link provided. Google Forms application is preferred by the researcher to spread the questionnaire is simply because it is free, user-friendly, and most importantly, this application is the most effective and efficient way to get responses from respondents as they were familiar with the app. Next, the researcher then shares the link of the survey questionnaire through *Whatsapp* application to the target respondents. Target respondents were teachers who taught the English subject in Sarawak’s primary school. The distribution of the questionnaire was handled by the researcher. Respondents answered the questionnaires and submit their responses. Responses were gathered and tabulated automatically in “response” section of the questionnaire form which could only be access by the researcher.

E. Data Analysis

Survey questionnaire was used to collect data and they were tabulated and analysed descriptively for the purpose of answering the two research questions. The Statistical Package Social Science (SPSS) version 23.0 was utilised to analyse data from the survey questionnaire. Using the descriptive statistics, the questionnaires were analysed as a means to collect frequency count and percentages. Results tabulated were presented in the forms of table.

IV. FINDINGS

The questionnaire measures respondents’ demographic background, their perceptions on flipped learning approach and the hurdles and obstacles that hinder the effectiveness of a flipped classroom. Findings are tabulated according to research questions.

A. Demographic Background

The first section of the questionnaire reveals that 84.5% of female teachers participated in this research. Most respondents (71.8%) have 1 to 5 years of teaching experiences. Majority of respondents (29.6%) are teaching in Miri division out of 11 divisions involved. On top of that, most respondents (66.2%)are teaching in the sub-urban school setting. 90.1% respondents revealed that they were familiar using technology for teaching and learning purposes. Finally, referring to the frequency of using the flipped classroom approach, majority (38%) of respondents agreed to the statement of using this approach for “a few times a year”.

B. What are the perceptions of teachers in ESL flipped classroom?

This research question includes six items or statements and respondents were required to answer all six items. There were four scales used in this survey questionnaire namely “strongly agree”, “agree”, “disagree” and “strongly disagree”.Table 1 presented descriptive statistics of the data collected.

TABLE 1: TEACHERS’ PERCEPTIONS ON FLIPPED CLASSROOM APPROACH

Item	Strongly agree	Agree	Disagree	Strongly disagree
1	16.9%	50.7%	29.6%	2.8%
2	16.9%	50.7%	25.4%	7.0%
3	12.7%	42.3%	33.8%	11.3%
4	25.4%	38%	28.2%	8.5%
5	23.9%	46.5%	16.9%	12.7%
6	22.5%	46.5%	19.7%	11.3%

Item 1: Students have more time to practice English language activities through flipped classroom.

50.7% of the respondents agreed that their students have ample time to practice English especially in speaking activities, 29.6% disagreed and 16.9% agreed. However, 2.8% stated that they strongly disagreed that their students have more time to practice the language through flipped classroom.

Item 2: Students feel more confident and they learn better in flipped classroom.

The majority (50.7%) agreed that their students feel more confident and they learn better in flipped classroom. However, the second majority of respondents (25.4%) disagreed followed by 16.9% of respondents strongly agreed and 7% strongly disagreed.

Item 3: Absent students benefit from a flipped classroom.

30 respondents (42.3%) agreed that this approach would benefit students who are absent from face to face interaction class whereas 24 respondents (33.8%) disagreed that the flipped learning approach would have significant benefit towards students. The other 12.7% respondents strongly agreed to this statement meanwhile 11.3% respondents strongly disagreed.

Item 4: In a flipped classroom, students have a sense of responsibility for their learning and come prepared to class.

Majority of the respondents (38%) agreed with this statement whereas the second majority of respondents (28.2%) disagreed. A total number of 18 respondents (25.4%) strongly agreed whilst a minority of them (8.5%) strongly

disagreed.

Item 5: Flipped classroom could help my students to become more active in learning.

Respondents generally agreed (46.5%) that their students could engage actively in the activities conducted and 23.9% of respondents strongly agreed to this statement. A small percentage of 16.9% disagreed with this statement whereas a minority of respondents (12.7%) strongly disagreed that flipped classroom approach helped students to be more active in learning.

Item 6: The flipped classroom gives me greater opportunities to communicate with my students.

A total number of 33 respondents (46.5%) agreed as well as 16 respondents (22.5%) strongly agreed with this statement. 14 respondents 29 (19.7%) disagreed whereas 8 respondents (11.3%) strongly disagreed and found that this statement is insignificant in their context.

C. What are the hurdles encountered by teachers in ESL flipped classroom?

The third part of the survey questionnaire included five statements regarding the second research question. Similar with the first research question, the scales used were “strongly agree”, “agree”, “disagree” and “strongly disagree”. Table 2 showed the descriptive statistics of the data collected.

TABLE 2: HURDLES AND OBSTACLES OF FLIPPED CLASSROOM APPROACH

Item	Strongly agree	Agree	Disagree	Strongly disagree
1	1.4%	22.5%	50.7%	25.4%
2	4.2%	32.4%	47.9%	15.5%
3	5.6%	36.6%	49.3%	8.5%
4	18.3%	33.8%	42.3%	5.6%
5	11.3%	46.5%	31%	11.3%

Item 1: The facilities in schools are conducive for flipped classroom.

50.7% of respondents disagreed that the facilities in their schools are conducive for flipped classroom. This was followed by 25.4% of respondents which hold the second majority who strongly disagreed with this statement. However, 22.5% respondents somehow agreed that the facilities in their schools are conducive to conduct flipped classroom approach.

Item 2: My students are ready for flipped classroom.

On the aspect of students’ readiness for flipped classroom, majority (47.9%) disagreed that their students are ready for flipped classroom. The second majority (32.4%) of respondents however agreed that their students are ready. Strongly disagreed was selected by 11 (15.5%) respondents followed by a small minority of 4.2% who strongly agreed with this statement.

Item 3: I have ample time to carry out flipped classroom.

49.3% of respondents disagreed that they have ample time to carry out flipped classroom whereas 36.6% of respondents agreed that they do have sufficient time to carry out this approach with their students. 8.5% respondents strongly disagreed and in contrast, only 5.6% of respondents strongly agreed with this statement.

Item 4: I need technical assistance to carry out flipped classroom.

For the aspect of technical support, 42.3% of respondents disagreed that they needed technical assistance to carry out flipped classroom. Meanwhile, 33.8% of respondents agreed that they needed technical help and support to carry out the flipped classroom approach. Surprisingly, a number of 13 respondents (18.3%) strongly agreed with this statement which means they might be having serious trouble or difficulties in some technical areas. On the other hand a small percentage of 5.6% of respondents strongly disagreed that they needed technical assistance to conduct flipped classroom

Item 5: Availability and access to technical support and resources have helped me improve my lesson.

46.5% of the respondents agreed that the availability and access to technical support and resources had helped them improve their lesson. In contrast, 31% of respondents disagreed and rejected this statement. Strongly disagreed and strongly agreed received same amount of percentages of respondents respectively (11.3%).

V. DISCUSSION

A. Positive views and perceptions among Sarawak teachers on ESL flipped classroom

Results have shown that respondents agreed and believe the flipped learning approach benefits students in many ways. Based on the percentage weightage on all six items, respondents agreed that students will have more time to practice English language activities and that students feel more confident and they learn better in flipped classroom. This is supported by a study conducted by Thevasigamoney&Yunus [47] on the treatment usage of digital e-mail journal writing on gifted students which indicates that students’ level of anxiety had been declined. Respondents might think that the flipped learning approach is mainly due to the role of e-learning which helps students to be more relaxed and comfortable. Respondents agreed that students have more time to practice the language as they do understand and believe the flipped classroom approach concept is about student-centered instructions whereby students engage actively in the lesson. This is supported by Stumpfenhorst [46] which reported that student-centered instruction and active learning was made possible in a flipped classroom.

Active learners are motivated and confident. Undeniably, motivation is acknowledged to be one of the most important elements that affect students’ performance and achievement. Marshall [33] in her model of Flipped Learning emphasised that one of teachers’ key role is to lead from behind and increase the opportunities for students to lead and collaborate with other students. Vimala [48] added that learners themselves can observe, give feedback and assess their own peers as they assess their own learning. Active learners practiced collaboration skills to share knowledge and experience with both teachers and peers which increases communication between teachers and students.

Majority of the respondents in this study also believed flipped classroom approach could benefit students who are absent from class and students have a sense of responsibility for their learning thus come better prepared to class through the flipped classroom approach. This perception aligns with the

result of a study by Bergmann & Samms [5] who revealed the flipped learning approach benefit strugglers and absent students due to the availability of outside classroom video lecture. Past studies done by Hung [20] in teaching of English language revealed that structured and semi-structured flipped classroom approach were more effective instructional design compared to the traditional classroom method. Furthermore, study done by Beapler, Walker & Driessen [4] had reported students' achievements in the flipped classroom are significantly better compared to those in a conventional classroom. In addition, students perceived the learning environment to be more positive by this approach.

In contrast, a study done by Jefferies [23] on Australian engineering undergraduates reported that not all students are open to the idea of online course components as they are unwilling to change from a familiar learning style. According to O'Flaherty & Philips [38] this was due to the attitude of finding the traditional method to be more familiar, comfortable instructor centered and they are more than happy to give little active participation.

B. Hurdles and obstacles in Sarawak ESL flipped classroom

Based on findings analysis in previous chapter, it is agreed upon that Sarawak teachers confronted obstacles in conducting the flipped learning approach in various aspects of poor accessible facilities in school, poor students' readiness, time constrain and lack of technical assistance in the approach.

Overall, 50.7% respondents through the survey rejected the fact that the facilities in their school are conducive for flipped classroom. This may be due to the current geographical factors and lack of technology facilities that could not be access in school as the respondents were made up mostly of teachers from rural and sub-urban school. Ertl and Plante [13] pointed out that information and communication technology usage is usually lacking in rural areas. Facilities that was lacking in these areas include poor road connectivity, power shortage, poor internet connectivity and limited ICT devices for learning.

Next, respondents revealed that their students are not ready for flipped classroom. As most of the respondents were teaching in rural and sub-urban schools, the socio-economic status among the community in these areas is relatively low. Most household might not be able to provide gadgets or devices intended for the flipped classroom approach furthermore the extra expenses of buying internet connection as the concept of flipped learning requires students to assess materials online. This situation might be different in the urban school setting as Asplough [3] pointed out that school achievement among the urban and rural school students varies as it is associated with students' socio-economic status. In addition, DeYoung & Lawrence [12] reported that "rural students may be at some disadvantage as compared with their urban counterparts in these respects, because small, isolated and low socio-economic rural communities often have less community involvement in education".

Findings also revealed that one of the hurdles respondents encountered in the flipped learning approach is not having ample time to prepare for flipped learning. Webb et al. [51]

mentioned that teachers need more time to prepare flipped classroom material. This is supported by Wanner and Palmer [50] preparation of flipped classroom materials can reach up to six times compared to preparation of materials for traditional class approach. Lack of functional facilities did not only affect students' learning but it gives impact on teachers' motivation as well since they did not have the ample time and facilities privilege. As mentioned by Ajai & Imoko [2] some teachers who are already in the system are not willing to put in their best in rural schools, for lack of motivation for teachers. Owoeye & Yara [39] reported this is due to factors such as the uneven distribution of resources and lack of functional facilities.

On the other hand, 42.3% of respondents pointed out that they do not need technical assistance to carry out flipped classroom and mostly agreed that the availability and access to technical support and resources have helped them to improve their lesson. Although respondents consider themselves as competent and skillful in technology or virtual learning, they are open to the idea of constantly accepting trainings and changes besides willing to improve their knowledge for the benefits of improving their lesson. This is supported by Harris, Koehler & Mishra [18] who pointed out that teachers needed to equip themselves with technological knowledge, pedagogical knowledge and content knowledge to be competent.

VI. CONCLUSIONS

Teachers' positive perception towards ESL flipped classroom reveals that teachers enjoy the idea of transforming or enhancing the traditional classroom methods through the usage of digital technology. This could bring changes into the current curriculum by suggesting integrating or blending virtual learning towards the traditional classroom approach. Although flipped classroom approach is not especially preferred by most teachers, positive perceptions were showed and nurtured among educators in Sarawak. It is understood the hurdles and obstacles faced encountered by Sarawakian primary school teachers, but they are accountable to do some modifications in their classroom such as blended learning approach aligned with the current 21st century learning. Future research can engage in qualitative data collection such as observation and interviews to gain detailed insights on teachers' perceptions and hurdles of flipped classroom.

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Sylvia Thomas is a student who pursuing her Masters of Education in TESL in Universiti Kebangsaan Malaysia (UKM), 43600 Bangi, Selangor, Malaysia. She graduated from Teachers' Training Institute of Baru Lintang Campus, Kuching Sarawak in 2015 with a Bachelor's Degree in TESL. She is currently teaching English language in Sekolah Kebangsaan Kampung Selanyau, Subis, Sarawak since 2016.

Parilah Mohd Shah is an Associate Professor at Faculty of Education in National University of Malaysia, 43600 Bangi, Selangor, Malaysia. She obtained her M.A. and Ph.D. from University of Connecticut, USA.