

Exploring Student Engagement in Writing using the Flipped Classroom Approach

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ABSTRACT

Over the years, considerable success of the flipped classroom approach (FCA) has indicated its usefulness in teaching and learning. However, studies on how flipped classrooms engage students in writing remain limited in Malaysia even though the ability to write well is considered an important skill. Therefore, this quantitative study sets out to examine students' engagement in writing in a flipped classroom through a self-developed questionnaire based on a meta-construct developed by Fredericks et al. (2004). One hundred and eighteen students involved in a writing course at tertiary level participated voluntarily in the study. The findings suggest that FCA is able to engage students in the writing process as demonstrated by high means reported for all three constructs, namely emotion (3.88), cognition (3.95) and behaviour (3.96). This study recommends FCA to be employed in all areas of language learning and offers practical guidelines for instructors and learners to maximise the flipped classroom experience.

Keywords: Engagement, flipped classroom approach (FCA), writing

INTRODUCTION

A flipped classroom is different from a conventional classroom as learning occurs in many forms which include “interactive

engagement, just-in-time teaching and peer instruction” (Berrett, 2012). It is a reversed teaching model where the instructor utilises different types of technology such as videos to record lectures in a normal classroom and allows students to view them outside classroom hours (Findlay-Thompson & Mombourquette, 2014). Gerstein (2012) defines the flipped classroom as a place to work out problems, advance concepts, as well as engage in collaborative learning. The flipped method is not only restricted

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to video lectures; students obtain most of the information outside the classroom through reading activities, online lectures or participation in online quizzes before class commences. During class, they engage in learning through student-centred activities such as games, group discussions, case studies or experiments facilitated by a teacher or an instructor. To put it simply, the flipped classroom model is based on the principle that homework is better done in class with assistance from the instructor whereas lectures are better completed at the students' own pace outside the classroom (Herreid & Schiller, 2013).

Overview of the Flipped Classroom Approach

Educators worldwide have been advocating for a more student-centred teaching approach to promote active learning among students. Active learning is a term for teaching practices which emphasise on student activity and their involvement in the process of learning (Prince, 2004). The flipped classroom approach (FCA) embodies active learning because activities carried out in the classroom require high levels of participation from students. Active learning such as teamwork, self-reflection and case studies engage and motivate students to attain more knowledge and improve their skills (Prince, 2004).

Over the years, many instructors have reported considerable success using this model which indicates its usefulness in the process of teaching and learning (Enfield, 2013). The flipped classroom model can

be implemented dynamically especially in institutions of higher education for the considerable advantages it offers. These include allowing classroom time to be utilised more effectively, higher rates of student achievement and the engagement and flexible use of technology (Fulton, 2012).

A survey conducted by Herreid and Schiller (2013) on 200 teachers found that the use of this classroom model was preferred as it helps promote critical thinking among students and makes them more responsible for their own learning process. As lecture time in institutions of higher learning is usually limited to one or two hours at a time, using the flipped classroom model also allows instructors to focus on students' different learning styles (McLaughlin et al., 2014) instead of relying entirely on lecture content.

As the flipped classroom model is implemented to give more face-to-face interaction time for hands-on activities, this method has been considered suitable for a writing course as it is expected that students will have more time to improve their writing with guidance from the lecturer in class after they have read and watched videos on the lecture before attending the class. The students can get prompt feedback from the lecturer if they have any inquiries or challenges in the writing process. In spite of these advantages that seem to accrue from it, there is a dearth of research studies on the implementation of flipped classroom or flipped learning method in English writing courses in a Malaysian context. Hence, this

study examines students' engagement and performance in part of a writing course delivered through a flipped classroom approach.

Research Objectives

1. To explore the use of the flipped classroom approach in teaching writing
2. To measure student engagement in writing using the flipped classroom approach

LITERATURE REVIEW

Definition of Engagement

Student engagement is closely related to students' involvement in classroom activities to enhance learning. It has been the focus of many researchers studying educational constructs through active participation in classroom activities by students. The term engagement has been defined by several scholars rather differently, based on different conceptualisations and dimensions. Kuh et al. (2007) defined engagement as a form of partaking in educationally effective practices to result in several assessable outcomes. Coates (2008) on the other hand, described engagement as students' participations in activities and conditions that are inclined to produce high-quality learning.

The study adopts the definition of engagement by Fredricks et al. (2004) as it was found to be the most relevant. Engagement is defined as a meta-construct which encompasses "behavioural, emotional and cognitive engagement" (p.59).

Behavioural engagement is a component which characterises students' participation, on-task attention, effort, persistence and positive conduct. Emotional engagement relates to student interest, belonging, value, and positive emotions. Finally, cognitive engagement comprises the use of strategic and sophisticated learning strategies and active self-regulation aspects (Fredricks & McColskey, 2012).

FCA and engagement

Problem solving activity is used to enhance student learning in the flipped classroom. According to Bishop and Verleger (2013), flipped classrooms require students carry out a review of the course online prior to attending class, and also spend time on problem-solving activities together with exercises in class that are traditionally known as homework.

The flipped classroom is a concept of active learning where students work on the materials shared by the lecturer and familiarise themselves with the lesson before class formally begins in order to facilitate discussion. The contents are generally in the form of videos, online tasks and more. This is supported by the findings of Mason, Shuman and Cook (2013) where they pointed out that inverted, or flipped, classrooms, are able to free classroom time for learner-centred activities such as active and problem-based learning.

According to Reeve and Tseng (2011), students' behavioural, emotional and cognitive engagement can be stimulated if they have a positive relationship with their

teachers and receive instructional support during their learning activities. It shows that the lecturer plays a major role in integrating the delivery content with the instructional approaches in the classroom. Students will feel engaged when they are able to apply the skills learnt in the writing process from the materials given outside of the classroom. Herreid and Schiller (2013) applied FCA by using interactive videos that encourage engagement among students. This approach generates a new conception of incorporating active, student-centred learning with content that can be applied in real situations. Furthermore, according to Jamaludin and Osman (2014), a positive relationship is demonstrated between engagement and FCA. Additionally, Clark (2013) asserted that project-based learning activities in class help increase students' understanding of the content and at the same time encourage them to be more engaged in their activities.

FCA in a Malaysian Context

The FCA is not a new concept in Malaysia. Danker (2015) studied the implementation of FCA to stimulate deep learning in large classrooms during the teaching of a film module. Deep learning happens when students search for meaning, interact actively and relate new and prior knowledge in the learning process (Danker, 2015). Jamaludin and Osman (2014) on the other hand applied the FCA to teach an Instructional Design course to undergraduate TESOL students.

Some researchers have also reviewed the implementation of FCA in the Malaysian

context. For example, Rahman et al. (2015) discussed the needs and issues of students' learning styles, especially in the flipped classroom teaching methods. While it is true that numerous research studies have been carried out in Malaysia on the flipped classroom approach, none of them have discussed how it helps to enhance writing skills.

FCA and Writing

Using the flipped classroom approach, students are encouraged to do their own research for their writing assignments. Thus, they are exposed to independent learning and are given the latitude to express their opinions and conduct peer evaluation through online mediums created by the instructor.

A survey by Farah (2014) found that the majority of students lack skills needed to write original pieces. In fact, students possess a limited range of vocabulary, their sentence structures are weak and their learning environment is not stimulating enough to spark their interests in writing. These are some of the concerns which are tackled in this paper.

Furthermore, the ability to write well is important since courses in universities require students to put their ideas into words and express them competently based on the specified standards and conventions (Horstmanshof & Brownie, 2013). Some of the difficulties faced by the students include organising their ideas on paper as well as not being accustomed to writing. The FCA is

believed to provide a platform for students to express their ideas effectively in writing in a more interactive and creative way.

METHODOLOGY

Sample

The respondents of this study were 118 students aged between 18-24 years. Of these, 55% of them are males while the rest are females. The respondents came from various ethnic backgrounds - 58.3% were Malays, 34.2% Chinese, 5.8% Indians and 1.7% representing other ethnic minorities. All students were involved in an English for Specific Purposes (ESP) course called Technical Writing.

Technical Writing

Technical writing is a course offered by Universiti Tun Hussein Onn Malaysia (UTHM) to undergraduate degree students. It is a 2-credit course which aims to prepare students for an essential part of their tertiary education where they have to prepare research proposals in their final year. Traditionally, the course is delivered through lectures and tutorials. However, for the purpose of this study, a flipped classroom approach (FCA) was applied for teaching proposal writing.

Table 1
Stages of FCA and technical writing

Stage	Action
Pre-FCA	<ul style="list-style-type: none"> • Students brainstorm 20 problems individually such as problems which occur in their daily lives • Students form groups of five and combine their list of problems to obtain a list of 100 problems (5 students x 20 problems = 100 problems) • Each student chooses one problem from the list of 100 problems • Students are given instructions to develop their own research proposal based on the notes and samples provided
FCA	<ul style="list-style-type: none"> • Students use the notes and samples to construct their proposals • Teacher collects and identifies common problems
Post-FCA	<ul style="list-style-type: none"> • Teacher addresses common problems including format, length and depth • Proposals are returned to students for a revision within a week

The implementation of the FCA was done in three stages, namely pre-FCA, FCA and post-FCA. The pre-FCA stage aims to prepare students for their proposal writing in which they individually list 20 problems that they think are interesting and solvable. This is followed by a formation of groups

of fives in which the students consolidate their problems so that they would have 100 problems. Next, they were told to develop their own research proposal based on the notes and the samples given. The notes provided the definition and techniques needed to write a good research proposal.

The students were given several samples of research proposals written by UTHM students to be used as a guide.

In the post-FCA stage, the teacher scans for common problems such as choice of topic, length, depth, literature review, grammar and others. These areas were addressed thoroughly. The proposal drafts were then returned to the students so that they could make corrections and submit the corrected proposals within one week.

Research Instrument

The instrument used in this study is a 5-point Likert scale to gauge responses for 25 items in the questionnaire. A study on student engagement by Fredricks and McColskey (2012) revealed that it consists of multiple dimensions. Therefore, this questionnaire was developed based on a meta-construct developed by Fredericks et al. (2004) to measure student engagement through three dimensions, namely behaviour, cognitive and emotion.

According to the literature (Appleton et al, 2006; Fredericks et al., 2004; Fredericks & McColskey, 2012), behavioural engagement

refers to student participation, conduct and effort while emotional engagement is measured through student interests, attitude or reactions and cognitive engagement can be gauged through students’ learning strategies and self-regulation. A pilot test was conducted with 11 respondents to test the validity of the items in the questionnaire. Data was analysed using SPSS (Statistical Package for Social Studies) version 22 and produced an acceptable Cronbach’s alpha value of 0.715, which indicated that the test was reliable (George & Mallery, 2003). A total of 223 students responded to the set of questionnaires posted via an online link and they were given three weeks to complete it. The students were also informed of it via Facebook and WhatsApp groups. Out of the 223 students involved in the flipped classroom study, 118 students or 53.8% responded.

RESULTS AND FINDINGS

High means were reported for the behavioural construct. Respondents were able to “focus well” (M=4.02, SD =0.84) and also “participate actively” (M=3.82, SD=0.86).

Table 2
Mean and standard deviation for the behavioural construct

Items	Mean	SD
10) I can focus well during the flipped classroom.	4.02	0.84
11) I participate actively during the flipped classroom.	3.82	0.86
12) I can complete the writing activity effectively using the flipped classroom approach.	3.94	0.83
14) I am able to complete the writing task using the learning materials provided.	4.06	0.83
18) I put a lot of effort into my writing during the flipped classroom.	3.98	0.92
Total	3.96	0.04

Respondents also cited that they were able to “complete the writing activity effectively” (M=3.94, SD=0.83) utilising “the learning materials” provided (M=4.06, SD=0.83). Perhaps the most interesting finding in the behavioural construct is when respondents agree that FCA has helped them to put in

more effort into their writing activities (M=3.98, SD=0.92). From the overall mean and standard deviation (M=3.96, SD=0.04) obtained for behavioural construct, it can be said that FCA was well-received by the respondents.

Table 3
Mean and standard deviation for the emotion construct

Items	Mean	SD
1) I enjoyed the flipped classroom approach used in this class.	4.35	0.83
2) The flipped classroom approach was interesting for me.	4.34	0.86
5) I feel confident doing the tasks given during the flipped classroom.	4.07	0.85
7) I like the flipped classroom approach because it allows me to learn at my own pace.	4.25	0.83
8) I like flipped classroom approach because it allows me to learn anytime and anywhere.	4.24	0.83
9) The flipped classroom is boring.	3.92	1.11
15) The flipped classroom approach motivates me to learn writing.	3.99	0.86
16) I feel anxious (worried, uneasy, fearful, nervous) learning writing without my lecturer.	3.13	1.20
19) I like receiving feedback for my writing.	4.22	0.81
22) I worry about my writing performance after going through FCA.	2.99	1.13
24) I feel prepared to learn writing using the FCA.	3.96	0.80
Total	3.88	0.08

For the emotion construct, the item that scored the highest mean (M=4.35) showed that respondents in general enjoyed the flipped classroom approach. The majority of the respondents agreed that it was interesting to learn in a flipped classroom (M=4.34, SD=0.86) as opposed to the statement “the flipped classroom is boring” which showed a relatively high mean of 3.92 after the responses were inverted. The respondents also said that the FCA approach is favourable because they can learn at their “own pace” (M=4.25, SD=0.83) and provides flexibility

(M=4.24, SD=0.83) by allowing them to “learn anytime and anywhere”. A high mean of 4.22 also indicated that respondents liked “receiving feedback” for their writing through the FCA, which was done via tools such as Google Drive. The respondents also felt “confident” (Mean=4.07, SD=0.85) and “prepared” (M=3.96, SD=0.80) in learning writing using FCA even though it was the first time they were exposed to it. They also appeared to be more motivated to learn about writing as indicated by a relatively high mean of 3.99. This could be because the

respondents were exposed to new ways of learning writing using the FCA, for instance, by watching videos on Blendspace and by presenting their work on Padlet where they could easily share their work with their peers.

On the other hand, the two statements which showed the lowest mean were “I feel anxious learning writing without my lecturer” (M=3.13) and “I worry about my writing performance after going through FCA” (M=2.99). These two statements

imply that even though students may feel motivated and engaged when learning writing using the FCA approach, ample facilitation from teachers and familiarity with the tools used are still important in order to reduce learner anxiety associated with writing. Overall, the total mean of 3.88 for the emotion construct shows that the respondents find the FCA approach enjoyable and interesting for learning writing.

Table 4
Mean and standard deviation for the cognitive construct

Items	Mean	SD
3) I experienced confusion during the flipped classroom.	2.98	1.04
4) I find it easy to learn writing using the flipped classroom approach.	4.04	0.90
13) I refer to the learning materials frequently to complete my writing task.	3.97	0.84
17) I am able to clearly express my ideas in writing using the flipped classroom approach.	3.94	0.86
20) The FCA helps me to review my writing lessons.	4.01	0.87
21) FCA makes me think about what I have learnt and what I am learning in writing class.	4.08	0.83
23) I believe I can write well after going through FCA.	3.83	0.79
25) FCA encourages me to explore more materials online to complete my writing task.	4.22	0.78
Total	3.95	0.15

Based on the table above, the total mean is 3.95 with a standard deviation value of 0.15. It was found that the highest mean comes from the statement “FCA encourages me to explore more materials online to complete my writing task” which is 4.22 followed by a SD value of 0.78. This statement implies that the majority of the respondents agree that the flipped classroom approach motivates and encourages them

to explore and use more online materials such as Padlet and Blendspace as their source of reference. Ideally, the flipped classroom encourages them to complete their writing task in a more interactive way. The respondents also agree that FCA makes them think about what they have learnt and what they are learning in the writing class (M=4.08, SD=0.83). Most of the respondents also found it easy to

learn using the flipped classroom approach ($M=4.04$, $SD=0.90$). This indicates that the FCA is a very convenient way of learning writing. The respondents also expressed that online learning materials help them in completing their writing tasks based on the word “frequently” ($M=3.97$, $SD=0.84$). On the other hand, the lowest mean ($M= 2.98$) and a high SD value of 1.04 was obtained from the statement “I experienced confusion during the flipped classroom”. This is most probably due to the respondents’ lack of familiarity with FCA and they may have experienced some difficulties in completing the writing task. This implies that clear instructions should be given by the instructor during the implementation of FCA to enable learners to accomplish their tasks smoothly.

CONCLUSION

Based on the findings, it can be concluded that FCA is able to engage students in the writing process in terms of behaviour, emotion and cognition. This finding corroborates with other studies (Bergmann & Sams, 2012; Lasry, Dugdale & Charles, 2014; Jamaludin & Osman, 2014) which showed overall positive results when FCA was used in engaging students in the learning process. However, certain guidelines should be adhered to by instructors and learners in order to ensure the success of a flipped classroom. First, the content or teaching materials used for the flipped classroom should be carefully selected for clarity and brevity to best meet the learning

outcomes. Videos or tasks should be kept brief, yet, comprehensive to maintain student engagement and motivation. Next, the instructors should ensure that the students understand their roles in the flipped classroom by informing them of their responsibilities and learning goals. Finally, the instructors should vary their learning activities in the flipped classroom to cater to learners of different levels. This way, the potentials of the FCA can be maximised and help make learning meaningful and engaging for all learners.

Recommendations for Future Research

For future research, it would be useful to compare the writing of learners from traditional classrooms and learners from flipped classrooms using a pre-test post-test approach. It would also be interesting to look at the challenges faced by teachers and learners who subscribe to the flipped classroom approach.

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