



EYL Students' Engagement in Flipped English Classroom through Interactive Digital Text

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Abstract. The flipped classroom is an appropriate strategy that leads to enhanced students' engagement, satisfaction, learning outcomes, and positive feelings. This research is conducted to investigate students' engagement on the used of flipped classroom in learning English through interactive digital text. It also aimed to determine the challenges faced by EYL students during the used of the learning model. The method of the study used a classroom action research design. The site of this research was sixth-grade students at an elementary school in West Java, Indonesia. Meanwhile, participants of this study consisted of 30 students for the observation and 6 of them were interviewed randomly. Observation, interviews, and artifacts were used to collect the data. The data analysis consisted of data reduction, data display, and conclusion. The findings of the research showed that the EYL students' engagement was dominated at the level of fully engaged and fairly engaged. It was concluded that EYL students were completely engaged during learning English using flipped classroom through interactive digital text. The main challenge for both EYL students and the teacher is the lack of facility and literacy in ICT since the use of flipped classroom needs to be online. Based on the results of this study which explained challenges that appear on EYL students, they are recommended having the desire to learn to use new media. The use of new media increased their knowledge since it helped them gaining the knowledge without difficulty.

Keywords: EYL Students' Engagement, Flipped English Classroom, Interactive Digital Text.

1 Introduction

Learning strategies implemented by teachers have to be in accordance with students' needs. However, in today's education, students' needs associated with technology which the learning process is required to technology-based. Teacher should conform to the technology for fulfilling the variances of students' needs [1]. Students individually engage with content material often through previously recorded lectures, prescribed readings, study guides, interactive videos, simulations, and cases before attending class. Meanwhile, in-class pedagogy involved such as interactive engagement, timely teaching and peer instruction [2].

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The flipped classroom is an appropriate strategy that could be utilized as a suitable technological development. It also leads to enhanced students' engagement, satisfaction and learning outcomes [3]–[5], and positive feelings about flipped learning [6], [7]. [8] stated that Flipped learning has the potential to make student-centered learning environments more interactive and technology-supported to engage students in the learning process. The activity is the teacher posting videos online. Students enjoy video lecturing since the videos are often used for exam reviews. This shows an increase in student engagement and achievement. Therefore, it can be said that students have positive response toward the use of flipped classroom. In using a flipped classroom, there is a contribution regarding a better understanding of the use of technology during learning because the students undertake learning activities independently [9]. This strategy also gives a good influence on the learning process. [10] stated that there is a good effect on the implementation of a flipped classroom where the strategy causes the active learning process in the classroom. The study of [11] illustrated that utilizing the flipped classroom increases student engagement in learning processes such as learning tasks, and makes them more active to interact in discussions, presentations. [12] used a flipped classroom that focuses on the perspective of students and teachers while [13] applied a flipped classroom by focusing on learner attitudes.

Nevertheless, studies also investigated the challenges faced by both students and teachers in implementing flipped classroom environment. For example, [14] recognized some infrastructure challenges, such as classroom availability and limited internet access. Meanwhile, [15] revealed the students' lack of responsibility and attendance fluctuation as well as learning pressure. [16] added that flipped classroom unfortunately lacks of immediate support. [17] highlighted that ICT competencies are required in flipped classroom environment.

There are various teaching and learning media to be used in the flipped classroom environment, such as online quizzes [13], the Line smartphone app [11] or YouTube and Online video hosting [12]. However, this study used interactive digital text as the media which are interactive electronic resources that integrate text with sound, animation, and graphics. Indeed, interactive digital text brings many positive contributions to students' learning. [18] suggested that interactive digital text allows young learners to rehearse literacy practice as well as talks for reader response and student agency. Likewise, interactive digital texts are enjoyable learning resources with plenty of modalities for students to make meaning [19]. Interestingly, [20], [21] found that students completed reading assignments more frequently in digital interactive texts format.

Thus, applying Classroom Action Research, this study aimed to investigate elementary students' engagement and challenges in flipped classroom environment using interactive digital text. It involved 30 elementary students in West Java, Indonesia.

2 Method

This study used Classroom Action Research (CAR) design. CAR is a form of self-reflection inquiry carried out by participants in social situations which aim is to improve

the rationality and justice on their own practice, their understanding of these practices, and the situations in which these practices are carried out [22].

The current research aimed at investigating young English learners' engagement in flipped classroom using interactive digital texts. The participants were sixth grade students at an elementary school in West Java, Indonesia. The research procedures consisted of acting (flipped classroom), observing (observation of the students' engagement and difficulties), reflecting (interview students and students' artifacts), and planning (lesson plan, digital interactive texts, and observation sheet).

Observation, interviews, and artifacts were used to collect the data. This study involved 30 sixth graders for observation and 6 students were randomly invited for the interview. The data analysis consisted of data reduction, data display, and conclusion.

In order to analyze the students' engagement, there are three types of engagement were analyzed, i.e. Behavioral, Social-Psychological and Academic Cognitive Engagement. Meanwhile, the levels of engagement were divided into four categories: fully engaged, fairly engaged, slightly engaged and disengaged [23].

3 Result and Discussion

3.1 Results

Students' engagement in English flipped classroom environment through interactive digital text. These descriptions are related to the use of flipped classroom in teaching English through interactive digital text at an elementary school in West Java, Indonesia. The author explains how students' engagement during the process of learning activities. The author describes the levels of each type of students' engagement in learning activities. The types of students' engagement are Behavioral Engagement (BE), Social-Psychological Engagement (SPE), and Academic-Cognitive Engagement (ACE). There are four levels of students' engagement, namely fully engaged, fairly engaged, slightly engaged, and disengaged. The author compared the percentage at each level of students' engagement. The data were obtained from observation, interviews with the students, and artefacts.

Behavioral Engagement (BE). The behavioral engagement has three elements, those are: to value schooling outcomes, participation, and attendance. Based on observations, it is discovered that the elements to value schooling outcomes are 45% fully engaged, 40% fairly engaged, 10% slightly engaged, and 5% disengaged. Meanwhile, in the participation element, it is discovered that there are 61% fully engaged, 18% fairly engaged, 9% slightly engaged, and 12% disengaged. The fully engaged level could be seen from how often students take part in reading activity through interactive digital reading. While students at the disengaged level are students who were absent during the activity. In attendance element, the result showed that 61% fully engaged, 24% fairly engaged, 3% slightly engaged, and 12% disengaged. Attendance is taken from meetings held that are. learning activities and interview.

Social-Psychological Engagement (SPE). Social-Psychological Engagement (SPE) has four elements, those are:

- a. **Sense of Belonging.** The sense of belonging can be seen from how students prepare for a performance in reading activities through interactive digital text. From the data, there are 51% fully engaged, 25% fairly engaged, 12% slightly engaged, and 12% disengaged. It is discovered from the students' reading activities that are how they prepare read to group assignments. Whereas the disengaged level consists of students who are not present during learning activities. From the interview session, it was also known that students made preparations before attending the classroom. They read the text that was shared.
- b. **Relationship.** The data shows that 37% fully engaged, 48% fairly engaged, 3% slightly engaged, and 12% disengaged. The relationship element is seen from how the students' relationship with the teacher and friends. Fully engage is a level where students respect the teacher and collaborate well with friends during the learning activities. Data was taken from interviews and observation on the discussion. Interview session indicated that students collaborated well enough with group friends during the discussion. The disengaged level is a category of students who are absent during the learning process.
- c. **Interest.** Interest is when students are actively involved during the learning activities, and they enjoy the learning process. The percentage of the interest element showed that the level of students engagement 66% fully engaged, 18% fairly engaged, 9% slightly engaged, and 7% disengaged. These results were obtained from their activity in the learning process. The results of the interview also showed that they enjoyed the activity.
- d. **Positive Feeling.** From here, it is known that the data from observation 34% fully engaged, 39% fairly engaged, 15% slightly engaged, and 12% disengaged. Fully engaged is when they are exited, such as they respond quickly and effectively when the teacher gives direction. Whereas those who tend to be unresponsive are categorized as slightly engaged. Furthermore, the disengaged is assigned to those who are absent during learning.

Academic-Cognitive (ACE). Academic-Cognitive (ACE) has five elements, those are:

- a. **Time-on-task.** In this element, it is observed when students complete and collect the assigned assignments. The author observes whether students complete assignments before due time, due time, additional time, or do not even collect assignments until the end of the meeting. From the data collected, it appears that the results showed that 35% fully engaged and fairly engaged. In the interview, the author asked students if they completed all the tasks given on time. Some students complete the assignment but do not collect on time because of the obstacles. These obstacles are the unstable internet connection and lack of understanding of how to use features interactive digital text.
- b. **Homework completion.** Homework completion is seen from whether students complete all the tasks given by the teacher. Those tasks are such as collecting resumes from the text they have read. Based on the data, the percentage of homework completion elements that have been observed is 52% fully engaged, 9%

fairly engaged, 15% slightly engaged, and 24% disengaged. Similar to time-on-task, homework completion also has obstacles in the internet connection to send assignments to the teacher.

- c. Response to challenges in learning. In this element, the author observes how students respond to face challenges while studying. When they do not understand the material or they have questions related to learning which are quite difficult for them, the author observes whether they ask the teacher and friends, only friends, do not ask because it is enough with what they understand, or even do not want to understand the material. It is known that the level of students' engagement from response to challenges in learning is 51% fully engaged, 25% fairly engaged, 12% slightly engaged, and 12% disengaged. Based on interviews with students, they asked friends if they have difficulty understanding the material. They also asked the teacher and their friends during learning activity.
- d. Concentration. The concentration of students seen during the learning process. The author observes from whether students pay attention to the teacher when explaining what they do not understand, and when the teacher gives instructions to them. The level of students' engagement on the concentration of the students during learning based on the data is 51% fully engaged, 28% fairly engaged, 9% slightly engaged, and 12% disengaged. The interview also shows that they always listen and pay attention to the teacher when the teacher is explaining the material and giving instructions.
- e. Effort toward learning. Efforts that students do during learning are the things to consider in this element. The author observes whether students study seriously during the learning activities. The author also observes whether students should be reminded when there are assignments given by the teacher. From these data, it is discovered that the level of students' engagement on this element is 51% fully engaged, 31% fairly engaged, 18% slightly engaged, and 0% disengaged. From the interview data, it was also said by students that they work seriously when working on assignments. Although some students must be reminded because they forgot to do it.

Challenges in Flipped English Classroom through Interactive Digital Text. The author analyzed what the challenges faced when learning activities are. The challenges that will be described are the challenges faced by the teacher and students. The challenges described are divided into 2 (two) types namely lack of literacy in ICT (Information and Communication Technology) and facilities. Lack of literacy in ICT is a condition where students do not have the ability and sufficient understanding of technology. However, lack of facility is a condition where the existing facilities during the learning process were inadequate. In this study, the author was being a teacher. The author practiced the use of the flipped classroom directly so that the challenges faced by the teacher are the statements of the author as a teacher.

Challenges faced by the teacher. At the time applying the flipped classroom, the author as a teacher had several challenges during learning activities take place. In this situation, the teacher had challenges in internet connection. It was due to the lack of

internet connection and the large number of accesses that wanted to open Interactive Digital Text, making it was difficult to access.

Challenges faced by the students. When implementing a flipped classroom, there are several challenges faced by students, those are: students' knowledge of ICT was still lacking so that students did not understand the use of a media. And then, most students did not understand how to use Interactive Digital Text because it was their first experience.

3.2 Discussion

Based on the data, it was found that the students were engaged during the learning process in flipped classroom environment using digital interactive text. In behavioral engagement, it was found that most students were at the fully engaged level. From each element, i.e. value schooling outcomes, attendance, and participation, the level of dominance is fully engaged and fairly engaged. This indicated that learning through interactive digital text with flipped classroom provided positive contribution towards the behavioral engagement of students. Likewise, [6], [7] found that students owned positive feelings about flipped learning.

In learning flipped classroom through online, it was not easy to check attendance and students' participation because an internet connection could affect it. Some students would like to study, but they could not participate in learning actively because of limited internet access. It created a percentage of slightly engaged and disengaged level. Moreover, as opposed to [9] the elementary students were found to require frequent reminder in regards to task completion.

The results of the observations also showed that most students were at the fully engaged level, which is then followed by fairly engaged. It also provided positive things for students' engagement when using flipped classroom. The level of interest and positive feelings were also nice because during learning, they were excited. They were also enjoy learning and active in discussions. It aligns with [8], [11] whose studies concluded that flipped classroom provide many opportunities for students to actively interact in discussions.

Nevertheless, the finding of this research had been explained to what the challenges are faced in learning English through flipped classroom. The main factors affected by learning are the application of flipped classroom online. This required the author to use the media as a means to implement group discussion. The author used interactive digital text as a media for students. The use of interactive digital text was a good thing if all students understand how to use and the features contained in it. However, the lack of literacy of ICT is one kind of challenges that appear. This is in line with [17] who emphasized ICT competencies in flipped classroom. Another students' obstacles during learning are about internet connection because not all students who live in areas that have good internet access. This refers to another type of challenges, namely lack of facility. As long as internet access is good, online studying will run well. Indeed, participants in other studies faced the similar operational obstacles [14], [16].

4 Conclusion

Based on the findings and discussions, the author made conclusions that the students were engaged in reading interactive digital text during the learning process using flipped classroom. The three types of students' engagement are dominated by fully engaged and fairly engaged level. In the type of behavioral engagement, students felt satisfied and even appreciated the results of what they had worked.

The implementation of online flipped classrooms had several challenges faced by the teacher and students. The challenges are divided into two kinds of challenges, lack of facility and lack of literacy in ICT. The teacher had the challenges only on the lack of facility. There were two obstacles which are the challenges during the implementation of flipped classroom. These are the obstacle to open the interactive digital text. Challenges appeared more in students. The challenges were lack of literacy in ICT and lack of facility. The challenges are the obstacle to open interactive digital text, lack of understanding of how to use interactive digital text, needed internet access, unstable internet access, and obstacle to access.

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