【Research Article】

Japanese EFL university student attitudes and engagement in a flipped learning course in combination with synchronous online classes

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Abstract

Flipped or blended learning has grown in popularity recently with its focus on student-centered learning and use of technology. The current study introduced a flipped learning approach in combination with synchronous online classes at a Japanese university during the COVID-19 pandemic. 106 first year students participated in this study. A mixed methods approach was adopted with quantitative (post-course survey, usage statistics from Blackboard) and qualitative (group discussions) data collected and analyzed using thematic analysis. Results suggested students viewed flipped learning favorably, the main advantages noted were that they felt well-prepared for classes, perceived improvements in their English abilities and valued the increased chances for interaction. Additionally, many students perceived improvements in their ability to self-regulate their learning. However, a decline in engagement with flipped learning materials was seen as the course progressed. Whilst engagement declined with some materials, there was consistently high engagement with graded materials which suggests incorporating flipped learning tasks into student grades may be one way to ensure students remain engaged.

Keywords: *flipped learning, engagement, self-regulated learning*

Introduction

Whilst active learning is not a new concept, only recently has it grown in popularity in Japan (Ito and Kawazoe, 2015). With the development of technology, there are now more ways students can be active in the learning process. Blended learning, as defined by Garrison and Vaughan (2008, p.5), is "the thoughtful fusion of face to face and online learning experiences" and has seen increasing popularity in education as institutions utilize learning management systems to deliver content (Siemens, Gašević and Dawson, 2015). One method of blended learning is flipped learning wherein students are introduced to new materials before class, which they study independently. Mehring (2015) defined the flipped classroom "as one where the instructor moved lecture content previously presented in class to the online environment" (p.10). Many researchers include or emphasize the use of technology in their definitions of flipped learning (e.g Chen Hsieh, Wu, and Marek, 2017; Hung, 2017; Mehring, 2014; Turan and Cimen, 2019), and for the purpose of this study I will also use this definition.

Literature Review

Recent reviews of flipped learning in English foreign language (EFL) learning have found improvements in student satisfaction, motivation, engagement, and language abilities when compared to traditional classrooms (Turan and Cimen, 2019; Grgurovic, 2017; Vitta and Al-Hoorie, 2020). In a study of Japanese university students using a flipped learning method, Mehring (2015) noted students became more active learners as compared to passive roles in previous traditional classrooms,

particularly due to having additional interaction opportunities with other students in an online forum. Whilst the use of online forums is not unique or integral in flipped learning, the method's integration with technology entails such tools are readily available to complement the flipped classroom. The increased opportunities for interaction given by use of online forums may be of particular value for Japanese EFL students. Mack (2012) noted some reasons students at a Japanese university did not participate in class discussions, for example, they felt uncomfortable speaking in front of others, or they could not respond quickly enough. In a study comparing the motivation of Japanese students to engage in face-to-face or online communication, Freiermuth and Jarrell (2006) found most students preferred online chats as this environment was perceived as more comfortable and less threatening. Abe and Mashiko (2019) also reported that Japanese students participating in an exchange with Filipino students found text chats more enjoyable than video chats. Utilizing online forums may be one way to engage Japanese students who display a reticence to speak English. In online forums, students have more time to formulate their ideas and can work at their own pace. Freiermuth and Huang (2012) found that use of an online chat tool improved Japanese and Taiwanese EFL students' willingness to communicate as well as other factors relating to motivation. Further, use of an international virtual exchange forum saw Japanese university students improve their interactional confidence and motivation to learn EFL (Hagley, 2020). Miyazoe and Anderson (2010) and Hirschel (2012) similarly reported positive views of online forums to aid Japanese students' EFL learning.

In addition to online forums, videos are often used in the flipped classroom. Mehring and Leis (2018) emphasize that videos are not essential to flipping a classroom but more important is the creation of a student-centered learning environment. Videos, however, are conducive to creating this environment. Unlike one-way lectures in the classroom, students may use the videos at their own pace, pause, rewind and replay to aid comprehension. Leis (2016) found that a flipped learning method delivered via videos accessible on mobile increased Japanese EFL students' confidence in listening and speaking and made students less passive and more productive in speaking.

Yet, there remains concern as to whether Japanese students are ready to engage in online environments. Mehran et. al (2017) found Japanese university students were generally unwilling to take either fully online or blended English courses due to a perceived lack of digital literacy skills. This is not unique to Japanese students. In a study comparing online and face-to-face classes at a university in California, Ni (2013) found higher rates of failure in online courses (10%) compared to face-to-face courses (4%). One of the main drawbacks of online courses is the lack of social interaction and there is evidence that students report greater course satisfaction and greater success, in terms of grades, in online courses which include synchronous interaction (Duncan, Kenworthy, and McNamara, 2012; McBrien, Rui and Jones, 2009).

Research Questions

Whether ready or not, the COVID-19 pandemic forced many institutions across Japan to move towards an online environment and thus provided a unique opportunity to assess how well students can adapt to this method of learning. This study aims to explore the attitudes of Japanese first-year EFL university students towards one method of online learning, flipped learning in combination with synchronous online sessions. The research questions were as follows:

1. What are Japanese EFL university students' attitudes to the use of flipped learning in combination with online classes?
2. How do students independently engage with flipped learning materials through Blackboard?

Whereas previous studies in flipped learning in EFL in Japan have combined the model by using technology to complement face-to-face sessions, this study looked at student attitudes towards the combination of a flipped learning method with synchronous online sessions conducted using Zoom. The second research question looks at engagement in terms of behavioral engagement with the flipped learning materials provided through Blackboard.

Methodology

Context

This study focuses on an English discussion course for first-year students at a private university in Japan. Due to the COVID-19 pandemic, classes were moved online. Previously, classes were planned for 100 minutes in groups of 9-10 students; however, to reduce strain on student internet connections and allow teachers to effectively monitor discussion groups, the faculty recommended classes to be split into two groups of 4-5 students for 40-minute weekly sessions conducted over Zoom. The recommended way to deliver the class in this new structure is compared to the flipped method chosen in Table 1 below.

Table 1
Comparison of the traditional method and flipped method for delivery of the discussion course

Traditional Method	Flipped Method
Reading about the topic (before class)	Reading about the topic (before class)
Lesson overview and check-in (in class)	**Presentation of discussion or communication skill (before class)**
Presentation of discussion or communication skill (in class)	**Videos related to the topic (before class)**
Practice of discussion or communication skill (in class)	**Discussion about the topic on an online forum (before class)**
Preparation for discussion (in class)	***Lesson overview and check-in (in class)***
12-minute Discussion (in class)	***Peer-to-peer reflection on this week's discussion or communication skill and goal setting (in class)***
Brief teacher-fronted feedback (in class)	***20-minute Discussion (in class)***
Set homework (in class)	*Peer-to-peer Feedback (in class)*
Written or recorded assignment (after class)	*Set homework (in class)*

Learning Materials

A battery of online materials was designed on the learning management system, Blackboard, which is integrated into the university's website. The materials included an announcements page with information about each class; slides which presented new discussion and communication skills; videos relating to the content of the discussion topics with quizzes based on these videos; an online forum; quizzes based on content related readings; and a grades page where students could check scores from quizzes, lessons and receive feedback comments from the instructor.

Data Collection

This study implemented a mixed-method triangulation approach (Cresswell and Plano Clark, 2018). Quantitative data was collected from a post-course survey completed online and usage statistics from Blackboard. This data was combined with qualitative data collected from recorded group discussions and analysed thematically.

Participants

The participants in this study were 106 first-year university students taking an English discussion course at a private Japanese university. All students were taught by the same teacher who is also the researcher. Of the 106 students asked to participate, 97 students completed the post-course survey. The students consisted of 11 classes and each class was separated into two discussion groups of four or five students. This made a total of 22 discussion groups. All students participated in the discussions, however, in four groups one student did not consent to the discussion being recorded. Data from these groups is not included which left a total of 18 discussion groups which were recorded and analyzed. A total of 92 students participated in these group discussions. Comments have been taken from the discussion groups and the speakers have been anonymized with numbers based on the order they spoke in the discussion. Finally, all 106 students agreed to usage statistics from Blackboard being collected.

Post-Course Survey

The post-course survey (see Appendix A) consisted of 18 items designed with a number of factors recommended by Dornyei (2003) taken into consideration such as the length, presentation and wording of the items. Items 2 to 14 were assessed using a 6-point likert scale. It has been suggested that Japanese tend to respond neutrally to survey items (Matsuura, Chiba and Hilderbrandt, 2001; Kimura, Nakata and Okumara, 2001) so it was decided to remove the neutral option to obtain a clearer indication of students' attitudes. The survey was translated to Japanese but also included the original items in English. The translation was checked by three native Japanese speakers who were also instructors on the course and were therefore well placed to know, not only if the translation made sense, but also if the students were likely to respond appropriately. A pilot test was conducted with one group of students, and there were no apparent problems with completion.

Blackboard Usage Statistics

Data was also collected from Blackboard in order to measure how often and for how long students accessed flipped learning materials. The in-built course reports tool on Blackboard allows instructors to track the amount of time spent on the course and the number of clicks per student per week as well as the area of the course students accessed.

Group Discussions

Qualitative data was collected from recorded group discussions at the end of the course. The group discussions were held in the same style as the regular discussions students participated in

throughout the semester - a 20-minute discussion conducted through Zoom with teacher observation but no intervention. After allowing the students to discuss the topic at length together, the teacher (also the researcher) asked a few follow-up questions to obtain information not covered in the discussion. If students had not already discussed details of the time they spend using materials on blackboard or strategies they employed, the teacher asked, “How long did you usually spend on Blackboard each week?” and “When you were using the materials on blackboard, did you use any strategy to help you?” Otherwise, students had a free discussion with no teacher intervention. Students had already received their final grades, and it was made clear that nothing they said would affect their grade. Throughout the course, students were also made aware that the content of their discussions was not graded, and they were free to express any opinions freely. These group discussions, recorded with student consent, were analyzed using a thematic networks approach (Attridge-Stirling, 2001), and the emerging themes were reflected upon with reference to the quantitative data.

Results

The results have been separated into the following two sections:

1. Student attitudes towards the flipped learning method
2. Actual engagement with the flipped learning method

After analysis of the recorded group discussions, the emerging themes were reflected upon with reference to the survey data and Blackboard usage statistics.

Student attitudes towards the flipped learning method

The first research question aimed to uncover student attitudes towards using a flipped learning approach in combination with online classes. There were four main themes identified in student attitudes:

1. Students felt better prepared for classes and perceived improvements in English skills
2. Students valued the increased opportunities for interaction given by flipped learning
3. Students perceived improvements in their self-regulated learning
4. Students felt the flipped method was demanding

Students felt better prepared for classes and perceived improvements in English skills

To survey item seven (“I felt more confident to join discussions after using the materials on Blackboard”) students showed a high level of agreement as shown in Table 2 below

Table 2
Responses to survey item 7 (“I felt more confident to join discussions after using the materials on Blackboard”)

Rank Value	Response	Total Responses		
1	Strongly Disagree	0	**Mean Response**	4.98
2	Disagree	2	**Standard Deviation**	0.92
3	Slightly Disagree	3		
4	Slightly Agree	21		
5	Agree	39		
6	Strongly Agree	31		

This increased confidence to join the class discussions appeared to come from doing more preparation before the class which is central to the flipped approach. Feeling better prepared was the most commonly noted advantage of flipped learning in the group discussions with 56 of the 92 students who participated commenting on this. Comments focused on learning discussion skills through the lesson slides and increasing knowledge about the topic through watching videos, reading, and doing independent research as well as using the forum to learn new ideas from classmates. For example:

> *“We can prepare our idea or discussion skills before class, and we can actually use this during class, so this is advantage.” (32)*

> *“Before we have this discussion class, we can share our ideas and I could reconsider my own ideas by reading your ideas so (the forum) was really good for me.” (52)*

> *“I thought by doing all the assignments on Blackboard we would be able to have more fruitful discussions, we can provide examples from what we see in the video and what we learned about it so it can be more productive” (84)*

The combination of a variety of activities such as videos, the forum and presentations about the discussion skills before classes appeared to be viewed favorably. Table 3 below shows the responses to survey item two (“Please indicate how useful each area of Blackboard was for you (1=not useful at all and 6=very useful)”). All materials which students accessed on Blackboard were perceived to be useful.

Table 3
Perceived Usefulness of Areas on Blackboard

Area of Blackboard	Mean Usefulness	Standard Deviation
Announcements	5.4	0.93
Lessons	5.25	0.87
Videos	5.32	0.8
Reading Quizzes	5.17	0.75
Forum	5.3	0.89
My Grades	5.27	0.99

In the group discussions, 27 comments focused on the usefulness of having the materials online with the possibility of reviewing materials such as,

"I think watching videos or posting the forum is better simply because it is more interesting than a book and it is easy to watch videos, so I think online homework is better for us." (46)

"On the Blackboard we can…we can always see the, you know, material so I could review those material after the class like after one month or after two months but usually if we go to the campus, I think unless we take a note, we're gonna lose those material or what we learned in the lesson so I think it was pretty good way to use Blackboard." (59)

It seemed to be a benefit of using online materials that they can be accessed not only before classes but also after classes. Generally, students perceived the use of technology in the flipped learning method as beneficial to their learning with 23 students commenting on the advantage of flipped learning in improving a wide range of English skills through the use of technology, for example,

"The advantage of this class is improved English skills, not only speaking but also writing and listening when using the forum or the reading quiz or videos." (74)

"I think improving English skill is one advantage. For example, reading the textbook improves out reading skills, watching videos improves our listening skills and speaking in discussion improves our speaking skills." (13)

In summary, students viewed the method as good preparation for their in-class discussions, and the range of activities delivered through Blackboard was also perceived to improve a range of English skills.

Students valued the increased interaction opportunities given by flipped learning

Another major theme to emerge was the desire for interaction with classmates. With classes being conducted online, students were unable to meet their new classmates. Students appeared to appreciate the additional opportunities for interaction which using the flipped learning method provided. The highest rate of agreement in the survey was from item number 9 ('In the zoom session, most of the time was spent interacting with classmates') with no students disagreeing with this.

Table 4
Student responses to survey item 9 ('In the zoom session, most of the time was spent interacting with classmates')

Rank Value	Response	Total Responses		
1	Strongly Disagree	0	**Mean Response**	5.53
2	Disagree	0	**Standard Deviation**	0.61
3	Slightly Disagree	0		
4	Slightly Agree	6		
5	Agree	34		
6	Strongly Agree	57		

The use of the flipped learning model allowed the majority of class time to be focused on student-to-student interaction. In the group discussions reflecting on the course, 33 students commented positively on the opportunities for interaction. Students appeared to value the change from presenting new material in class to before class as this freed up time for more interaction, for example,

> *"By doing flipped learning we can have more time to talk in the class. It makes the atmosphere more relaxed and friendly. If we do learning with slides in this class, it means that we cannot have much time to talk with each other so it helped us." (68)*

> *"This class had many discussion on zoom with classmates but other classes have no interaction with classmates so I enjoyed this class." (16)*

On average, students also indicated agreement with survey item 11 ("I had more chances to interact with classmates by using Blackboard") although there was far more disagreement with this item (23 students).

Table 5
Responses to survey item 11 ("I had more chances to interact with classmates by using Blackboard")

Rank Value	Response	Total Responses		
1	Strongly Disagree	0	**Mean Response**	4.13
2	Disagree	12	**Standard Deviation**	1.14
3	Slightly Disagree	11		
4	Slightly Agree	36		
5	Agree	28		
6	Strongly Agree	10		

As shown previously, the majority of the students perceived the forum to be useful and students commented on this in the group discussions, for example,

> *"I think forum worked really well to get more interaction with classmates." (58)*

The higher rate of disagreement with this item is perhaps reflective of the students' desire for more synchronous interaction. The interaction on Blackboard was asynchronous in forum posts and seemed to be valued less highly than the synchronous Zoom sessions.

Students perceived flipped learning as improving self-regulated learning

There were indications that the flipped method had a positive effect on making students more active in the learning process and improving their self-regulated learning (SRL). Firstly, students showed fairly strong agreement with survey item 6 ("Using Blackboard on this course helped me to learn more actively") as can be seen in Table 6 below.

Table 6
Responses to survey item 6 ("Using Blackboard on this course helped me to learn more actively")

Rank Value	Response	Total Responses		
1	Strongly Disagree	0	**Mean Response**	4.58
2	Disagree	2	**Standard Deviation**	0.93
3	Slightly Disagree	9		
4	Slightly Agree	32		
5	Agree	39		
6	Strongly Agree	15		

This suggests that students believed the method gave increased autonomy and control over their learning. Students also showed strong agreement with survey item 8 ("I Improved my independent study skills on this course")

Table 7
Responses to survey item 8 ("I Improved my independent study skills on this course")

Rank Value	Response	Total Responses		
1	Strongly Disagree	0	**Mean Response**	4.61
2	Disagree	1	**Standard Deviation**	0.88
3	Slightly Disagree	9		
4	Slightly Agree	30		
5	Agree	42		
6	Strongly Agree	14		

This appears to indicate that students believed they could successfully deploy task strategies during the course. A total of 20 different comments were made on topics relating to SRL in the group discussions. Some example comments are included below which focused on self-regulation and improvement of task strategies such as time management.

"We can improve time management skill is advantage of flipped learning." (6)

"I think that flipping learning makes us think more by myself so I think flipping learning will make us improve our thinking so I think it is advantage of flipping learning." (77)

However, some students lacked confidence in their own strategies, with 15 students making comments which showed either a lack of actual skills or low self-efficacy.

"We have to manage our time to study before the class so it is difficult for me to do that." (48)

"I also think that difficult to understand when studying alone is one problem." (31)

There seemed a common belief that while flipped learning might suit some students, others may struggle with this style of learning. As one student commented,

"I think it really depends on how much students are diligent or not." (72)

Overall, whilst some students may have struggled with the added responsibility of the student-centered, flipped approach, most students felt that their study skills were enhanced, and the majority of students responded positively to survey item five (“I feel more self-confident in learning English after this course”) as can be seen in Table 8 below

Table 8
Responses to survey item 5 (“I feel more self-confident in learning English after this course”)

Rank Value	Response	Total Responses		
1	Strongly Disagree	0	**Mean Response**	4.68
2	Disagree	1	**Standard Deviation**	0.87
3	Slightly Disagree	6		
4	Slightly Agree	33		
5	Agree	40		
6	Strongly Agree	17		

This would suggest that the course increased self-efficacy among many students. The flipped method implemented in this course allowed more class time to be dedicated to peer-to-peer reflective activities after group discussions. Students appeared to find this useful as indicated by responses to survey item 10 (“Reflecting on my discussion skills with classmates on zoom helped me to improve”). As can be seen in Table 10 below, only three of the 97 survey respondents showed any disagreement with this statement.

Table 9
Responses to survey item 10 (“Reflecting on my discussion skills with classmates on zoom helped me to improve”)

Rank Value	Response	Total Responses		
1	Strongly Disagree	0	**Mean Response**	5.02
2	Disagree	1	**Standard Deviation**	0.82
3	Slightly Disagree	2		
4	Slightly Agree	20		
5	Agree	45		
6	Strongly Agree	29		

Had the flipped method not been used then it is unlikely there would have been time for this peer-to-peer feedback stage of the lesson.

Students felt flipped learning was more demanding

Some students felt that the flipped method was too demanding of students and perhaps more difficult than traditional methods. A total of 30 students made comments in their discussion about flipped learning increasing their workload, for example:

> *“Flipped learning spends more time studying about the basic information in the topic before class so we can say it is hard work.” (81)*

A number of these comments related to the increased workload of flipped learning being

exasperated by doing online classes, for example:

> *"I think disadvantage of flipped learning is more work for students and difficult to manage time because we have many homeworks because of coronavirus. Sometimes it was hard to do many homeworks before class and we must do homework before class, not after so I can't submit late after class. I think it is difficult." (30)*

It seemed that students were feeling overloaded in other classes which led to the belief that flipped learning was more work for students, for example:

> "*I think more work for students is the disadvantage because all other classes were online lessons so there are too many tasks. I was busy with tasks every day, so I want teachers to reduce the amount of tasks next semester." (78)*

There seemed to be a perception that online learning in general increased the workload on students. Additionally, the change to the more student-centered approach of flipped learning may have led to some students feeling overwhelmed as they may have been accustomed to more passive, teacher-led instruction during high school.

Actual Engagement with the Flipped Learning Method

The Technology Assessment Model (TAM) has been widely used to predict use of technology (Lee, Kozar, Larsen, 2003) and in the context of EFL in Japan, Dizon (2016) showed Japanese students' intention to use technology to assist their EFL learning was influenced by its perceived ease of use and perceived usefulness. As shown, students viewed the materials on Blackboard as generally useful. In addition, responses to survey item 3 ("Please indicate how difficult or easy each area of Blackboard was for you to use (1=very difficult and 6=very easy)") signaled that students found the materials easy to use as can be seen in Table 10 below.

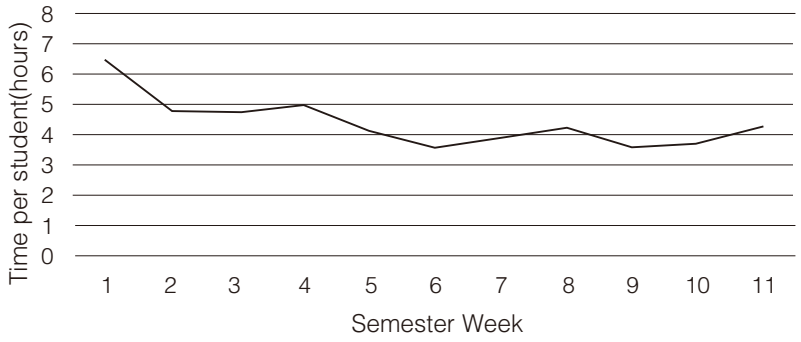
Table 10
Perceived ease of use of Blackboard areas

Area of Blackboard	Mean Ease of Use	Standard Deviation
Announcements	5.6	0.74
Lessons	5.41	0.92
Videos	5.45	0.8
Reading Quizzes	5.37	0.89
Forum	5.3	0.88
My Grades	5.39	0.81

Announcements (5.6), videos (5.45) and lesson slides (5.41) were ranked as the easiest to use areas. To compare this to actual use, data relating to behavioural engagement was gathered through Blackboard statistics in terms of average time spent on the course and average number of clicks. The data revealed students spent an average of 4.28 hours per week using Blackboard for this course. Blackboard will only log students out after three hours meaning students may have been logged in but not actually active on the platform. In the group discussions, students were asked to estimate how

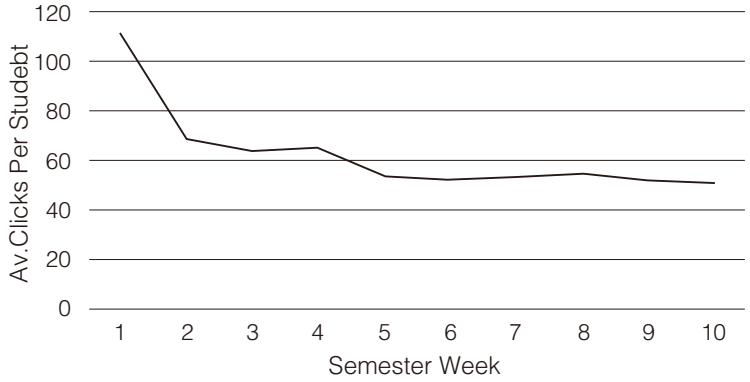
long they spent using materials on Blackboard each week on average and the majority reported spending around one or two hours. As very few students reported using Blackboard for as much as 4.28 hours, it seems that this figure was taking into account a large chunk of idle time when students were not active on the platform.

Figure 1.
Average time spent on Blackboard per student per week



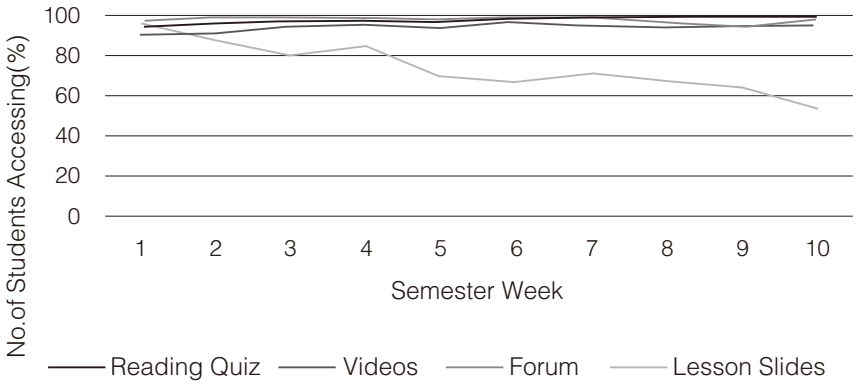
The average number of clicks was also extracted from Blackboard's course evaluation tool and showed an average of 50 clicks per student per week.

Figure 2.
Average number of clicks per student per week on Blackboard



Weekly average time spent and number of clicks on Blackboard decreased, particularly after week one (Figures 1 and 2). The sharp decline from week one to two may be due to students familiarizing themselves with the platform in the first week. This might have led to longer time spent on the site and clicking on different areas to see how to use each section. From week two onwards, there continued to be a steady decline as can be seen in comparing the number of clicks from week two (69) with week ten (51). This may have been due to increased efficiency as students became more proficient at navigating the site, but other data extracted revealed some areas of the site in particular saw a drop in engagement. Students completed reading quizzes, video quizzes and participated in the forum on a consistent basis throughout the course. Figure 3 below shows the number of students who completed these tasks each week as well as the number of students who accessed the lesson slides.

Figure 3.
Weekly percentage of students accessing areas of Blackboard



Completion of the reading and video quizzes as well as participation in the forum was over 90% throughout the course and showed no sign of decline. The lesson slides, however, were accessed by fewer students as the course progressed. The main difference between the lesson slides and the videos, reading quizzes and forum would appear to be the grading. As was reported, students ranked the lesson slides as just as useful as other areas such as videos, the forum and reading quizzes. Additionally, as shown in Table 10 above, the lesson slides were viewed as just as easy to use as the other areas. However, use of this section did not directly affect students' grades. Scores on the reading quizzes, video quizzes and participation on the forum were all integrated into students' overall grades. This appeared to facilitate student usage in these areas.

Discussion

This study aimed to assess student attitudes towards flipped learning in combination with synchronous online classes as well as measure how students accessed learning materials through Blackboard. Students were generally positive about the method, which aligns with previous research which found positive attitudes towards flipped learning among Japanese EFL students as well as linguistic improvements (Mehring, 2015; Leis, 2016; Hirschel, 2012; Dizon, 2016). These previous studies integrated the flipped method in combination with face-to-face classes, but it would appear many of these benefits persist when combined with synchronous online sessions. The variety of activities introduced to students through Blackboard such as videos, quizzes and use of an online forum were viewed favorably, which confirms previous research showing Japanese EFL students may be engaged through these type of activities as they are enjoyable and may be used at learners' own pace (Yamauchi, 2009; Hirschel, 2012; Miyazoe and Anderson, 2010).

The flipped method also encouraged more autonomous learning, and there were indications that students improved their self-regulated learning. Similar benefits in the improvement of SRL skills have been noted by previous studies utilizing technology in the learning process with Japanese EFL students (Kondo et. al, 2012) whilst introduction to SRL techniques such as goal setting and self-evaluation have been shown as ways to improve EFL learners' SRL (Cleary and Zimmerman, 2004; Tsuda and Nakata, 2013). The flipped method adopted allowed more time to be spent in class on these reflective activities and less time spent passively listening to the teacher.

In addition, the integration with technology gave more opportunities for interaction via an online forum and Zoom. The use of such communicative technology may be of particular benefit to Japanese

EFL students who are low in confidence in speaking English. Previous studies have shown online platforms such as asynchronous forums can improve Japanese EFL students' willingness to communicate and motivation to learn English (Freiermuth and Huang, 2012; Hagley, 2020; Freiermuth and Jarrell, 2006; Abe and Mashiko, 2019).

Another finding was that students' use of flipped learning materials declined during the course. Similar declines in engagement have been noted with flipped learning as courses progress (Heron and Thompson, 2019; Chen, Wang, and Chen, 2014; Abeysekera and Dawson, 2015; Admiraal et al., 2017). In this course, ungraded materials which saw a decline in usage. Kondo et. al (2012) also noted a decline in engagement with a mobile learning device among Japanese EFL students when grades were no longer directly related to its use. Extrinsic motivation such as test scores and passing courses has been found to be high in Japanese EFL students, particularly lower-level students (Fukada, 2018; Fukada, 2019; Konno, 2011). This course was mandatory for all students, so it is inevitable there would be some students who are low in motivation. For these students, engagement may be facilitated by making assignments part of students' grades as almost all students accessed all of the graded materials throughout the course.

Limitations and Future Research

The study used a fairly small sample size of 106 students and took place over only one semester. A study over a longer period of time may provide greater insight into the factors that engage students in online learning environments. The context of the study which took place under COVID-19 restrictions may also have heavily influenced student attitudes so a future study in a post-COVID era may provide more insight. Further investigation is needed to determine the reason some students disengaged with materials. It was believed that this was due to the materials not being part of student grades; however, a further study is needed to investigate how determining a factor grades are for engagement. This study also saw some indications that flipped learning may increase students' SRL skills; however, a further study could measure this in more detail with pre and post-tests to determine to what extent SRL skills are enhanced by flipped learning. Finally, there was no control group in this study. A control group taking the class in a traditional style would allow better insight into the effects of flipped learning on student attitudes and engagement.

Conclusion

Although there were limitations to this study, it provides some support for the move towards more student-centered learning environments and the incorporation of technology into EFL in Japan. Students had largely positive attitudes towards the flipped learning method in combination with synchronous online classes. In particular, the approach offered a way of maximizing the limited class time for interaction, which was highly valued. The combination of synchronous and asynchronous interaction also had benefits. Students perceived improvements in a range of linguistic skills as well as in their SRL skills and showed high engagement in the method with almost all students using the online forum, videos and quizzes every week to prepare for their discussions. However, a decline in engagement was seen with lesson slides which presented new discussion skills to students online. In addition to this decline in engagement, some students found the method more demanding, which suggests it may be important to assess learners' readiness for online learning before its implementation. Unfortunately, due to the COVID-19 pandemic, many institutions have been forced

online at short notice; however, in this situation including as many interactive activities as possible would appear to mitigate some of the problems of online learning.

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Appendix A
Post Course Survey Questions

1. By doing the materials on Blackboard, what English skills could you improve? (Tick all that apply) ブラックボード上の教材を活用することで向上した英語スキルは次の内どれですか？（当てはまるものを全てチェックしてください。）

Speaking　　Listening
Reading　　Writing
Discussion Skills　　Communication Skills
　　Vocabulary

2. Please indicate how useful each area of Blackboard was for you (1=not useful at all and 6=very useful)ブラックボードの各セクションがどの程度役に立ったかレベル 1 からレベル 6 で回答ください。（レベル 1：全く役に立たなかった〜レベル 6 とても役に立った）

	1. Not at all useful/全く役に立たなかった	2. Not useful/役に立たなかった	3. Not very useful/あまり役に立たなかった	4. A little useful/少し役に立った	5. Useful/役に立った	6. Very useful/とても役に立った
Announcements/お知らせ						
Lessons						
Videos						
Reading Quizzes						
Forum						
My Grades/成績表(学生用)						

3. Please indicate how difficult or easy each area of Blackboard was for you to use (1=very difficult and 6=very easy) ブラックボードのそれぞれのセクションがどの程度使用しやすかったか答えてください。

	1. Very difficult/とても使用しづらかった	2. Difficult / 使用しづらかった	3, A little difficult/少し使用しづらかった	4. Quite easy/少し使用しやすかった	5. Easy/使用しやすかった	6. Very easy/とても使用しやすかった
Announcements/お知らせ						
Lessons						
Videos						
Reading Quizzes						
Forum						
My Grades/成績表(学生用)						

4. I feel more self-confident in learning English after this course.
このコース修了後、英語を学ぶことに対して自信がついたと思う。

5. Using Blackboard on this course helped me to learn more actively
本コースでブラックボードを使ったことで、よりアクティブに勉強することができた。

6. I felt more confident to join discussions after using the materials on Blackboard.
ブラックボード上の教材を授業前に使用したことで、ディスカッションに参加する自信がついたと思う。

7. I improved my independent study skills on this course.
本コースを通して、自己学習スキルが向上した。

8. In the zoom session, most of the time was spent interacting with classmates.
Zoom セッションでは、大半の時間がクラスメートと意見交換する時間に充てられていた。

9. Reflecting on my discussion skills with classmates on zoom helped me to improve.
Zoom でクラスメートとディスカッションスキルについて振り返りをしたことは、自分自身のスキル向上に役立った。

10. I had more chances to interact with classmates by using Blackboard.
ブラックボードを使うことでクラスメートと交流する機会が増えた。

11. I felt I could communicate with the teacher through Blackboard if I had any problems.
何か問題があった際に、ブラックボードを通して講師とコミュニケーションを取れると感じた。

12. Receiving feedback on Blackboard helped me to improve my discussion skills.
ブラックボード上でフィードバックをもらったことは、ディスカッションスキルの向上に役立った。

13. I felt less nervous about speaking English on zoom than face-to-face.
対面より、ズーム上で英語を話す方が緊張しないと感じた。

14. It was easier to communicate on zoom than face-to-face.
対面より、ズーム上の方がコミュニケーションがとりやすいと感じた。

15. Are you male or female? あなたの性別を選択してください。

16. What level were you on the discussion course?
本コースにおけるあなたのクラスのレベルを選択してください。

17. What was your score on the TOEIC or CASEC test before this course?
本コースに受講前の TOEIC もしくは CASEC の点数を教えてください。

18. What is your major? あなたの専攻は何ですか？