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Flipped model for improving students' English speaking performance

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ABSTRACT

Flipping is a creative way for teachers to maximize class time for students' practices. Motivated by relatively productive results of flipped instructional method in teaching content subjects, the current study employed a quasi-experimental design including pre- and post- speaking tests, a questionnaire and a semi structured interview to examine the effects of a flipped classroom model on EFL (English as a foreign language) students' speaking performance. Students' attitudes towards the model were further explored. The results showed that the students improved their speaking skills thanks to the flipped model, and they had a positive perception about the model. The study provides useful implications of integrating flipped instruction in foreign language teaching.

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1 INTRODUCTION

As Vietnam is integrating into the ASEAN (Association of Southeast Asian Nations) community, Vietnamese graduates' ability to communicate in English has become more urgent and essential in order to compete and advance in their future careers. Currently, however, Vietnamese graduates in general lack confidence in communicating in English despite over 1,000 hours of English lessons. To enhance general English proficiency of Vietnamese, in 2008, the Ministry of Education and Training (MOET) launched the National Foreign Languages 2020 Project, which has led to a significant policy change in English education at all levels. Undergraduate students, for example, are required to obtain an equivalent to B1-level of CEFR (Common European Framework of Reference for Languages) as a prerequisite to graduation. Yet, with their currently weak English proficiency, it is difficult for them to meet this requirement, given that opportunities for speaking practice in the classroom are limited. Class meeting time in the general English courses is usually two hours per week while speaking is considered to be the most important but difficult skill to acquire (Ur, 1996).

In such a situation, incorporating flipped classroom instruction to increase speaking practice time in the classroom is essential because this model provides opportunities both inside and outside the classroom for students to be exposed to significant inputs and practices. According to Rivero (2013), most educators who experimented with this method found positive results in test scores and student attitudes. The research has also indicated that students perceive the flipped classroom as a positive learning experience, with increased motivation and self-perceived knowledge and performance (Avdic & Akerblom, 2015). However, much of research has focused on teaching content subjects; little research has been conducted with regards to English learning and teaching (Loi, 2014). Therefore, the current study was an attempt to experiment the model in teaching General English at tertiary level. The study

aimed to examine the effects of a flipped model on English speaking performance of a cohort of undergraduate students and their perceptions of this alternative method. Two research questions are investigated:

(1) Does the flipped classroom improve EFL students' speaking performance more than those who learn with the non-flipped classrooms?

(2) What are the students' perceptions of the flipped classroom?

2 LITERATURE REVIEW

2.1 Blended learning and flipped model

Technology has significantly impacted language teaching and learning in different ways throughout the world. Second language/foreign language courses that incorporate technology with face-to-face instruction have been found to promote L2 learning effectively as they can give students the flexibility to work independently and at their own pace, which promotes language acquisition (Kırkgöz, 2011). Indeed, blended learning is one of the prominent applications so far that creates a learning environment that promotes better achievements (O'Flaherty & Philips, 2015). In addition, recent studies have confirmed the effectiveness of blended learning in improving students' language proficiency (Behjat *et al*., 2012; Obari, 2012; Adas & Bakir, 2013; Zahedi & Tabatabaei, 2015; Banditvilai, 2016; Geta & Olango, 2016;), especially students' speaking performances (Kırkgöz, 2011; Ibrahim & Yusoff, 2012; Rodrigues & Vethamani, 2015).

There are four models of blended learning: the rotation model, the flex model, the self-blend model and the enriched virtual model. The flipped classroom is generated from the rotation model of blended learning (Heather & Michael, 2012). Although studies on blended learning have been commonly investigated in various disciplines (e.g. Farangi *et al*., 2015; Richard *et al*., 2014; Michael & Susan, 2014), flipped language classrooms have been understudied.

Flipped instruction is characterized by technology-enhanced learning in and out of the classroom (Hamdan *et al*., 2013). Teachers provide electronic resources and information for students to preview subject matter content before they come to class. It is also known as the inverted classroom, reversed instruction, and blended learning (Bergmann & Sams, 2012) which follow the learner-centered approach and active learning method. Schultz *et al.* (2014) stressed that most students had a favorable perception about the flipped classroom, noting the ability to pause, rewind, and review lectures, as well as increased individualized learning and increased teacher availability. Nguyen (2014) reviewed a number of studies in content subject and concluded that flipping the classroom has shown to promote students' motivation, learner autonomy, as well as learning achievement in many subjects, and suggested that the model could be experimented with L2 classrooms and that teachers should reflect on it critically.

Four design principles for a flipped classroom have been proposed. These included (1) opportunities for students to gain exposure to input prior to class, (2) an incentive for students to prepare themselves before class, (3) a mechanism to assess students' understanding, and (4) in-class activities that focus on higher-level cognitive activities (Brame, 2013). Kim *et al.* (2014, cited in Li *et al*., 2015) have recently revised the fourth principle into "providing clear connections between in-class and out-of-class activities" and added five more principles: (1) a clearly defined and well-structured guidance, (2) sufficient time for students to carry out assignments, (3) facilitation for building a learning community, (4) prompt/adaptive feedback on individual or group works, and (5) easy and friendly access to technologies. In the current study, some of Brame and Kim *et al*.'s principles were selectively adopted to improve students' speaking skills and were clearly explained in details in the methodology section.

2.2 Effects of flipped classroom in teaching language

Recent years have witnessed a trend of implementing flipped classroom instruction in teaching different subjects. Results have been positive, with students having more attendance, increasing test scores and positive attitudes towards learning (Farah, 2014). Flipped model was also examined for its effects on students' learning strategies (Avdic & Akerblom, 2015) or students' perceptions (Li *et al*., 2015). However, little research has focused on the effect of the model on L2 development, especially learning English speaking skills. One of the pioneers in using flipped instruction in teaching language skills was Farah (2014). This study examined the impact of a flipped classroom instructional method on twelfth-grade Emirati female students' IELTS (International English Language Testing System) task 1 and 2 writing performance and their perceptions of the flipped instruction in an ESL (English as a Second Language) writting setting. The results indicated a significant difference between the mean scores in

favor of the experimental group, and students' positive attitudes towards this model.

Generally, flipped instruction research in language teaching has been understudied and concentrated on students' experiences and perceptions, learning strategies and its effect on writing performances with very promising results. The gap remains significant for an investigation into the effect of this model on students' English speaking performance.

2.3 Speaking performance and flipped classroom

As part of communicative competence, speaking abilities involve the use of the target language effectively to communicate ideas orally. According to Nunan (1999), communicative competence comprises of knowledge of the grammar and vocabulary of the language; knowledge of rules of speaking (knowing how to begin and end conversations, knowing what topics can be talked about in different types of speech events, knowing which address forms should be used with different persons one speaks to and in different situations); knowing how to use and respond to different types of speech acts such as requests, apologies, thanks, and invitations; and knowing how to use language appropriately (p.226). However, Vietnamese students seem to lack vocabulary to express their ideas and especially need an environment to practice or use English in daily life.

Jamie (2010) conducted an action research to explore the use of technology in preparing EFL students for oral presentations. In terms of the design, the students in the experimental groups had to go to the school's computer lab to search for information on their presentations' topics. As the content was ready, they learned about and practiced with the program 'Audacity', which allowed them to hear their own voice. Then, they used flip cameras to prepare for their presentations. By this way, the partners recorded each other and reviewed the video clips so that they could comment and learn from one another. Meanwhile, the control group followed the traditional instructional method. The study employed pre and post surveys accompanied with teacher observations, student rubric, and students' self-assessment to determine the impact of the flipped model on students' oral presentations in terms of eye contact, body language, confidence, enthusiasm elocution, and word choice. The result revealed that the use of technology during preparation made presenters more confident.

Also, Farangi *et al.* (2015) studied the effects of podcasting on EFL learners' speaking skills. Sixty Iranian upper-intermediate learners participated in the study and were divided into three groups: two experimental groups and one control group. The first experimental group involved in student-made podcasts of pair and group discussions and uploaded them to a podcasting service. The second experimental group used web-based podcasts related to their speaking topics whereas the control group followed communicative language teaching. Data collected through pre and post speaking tests revealed that podcasting had a positive effect on the learners' speaking skills in the experimental groups; specifically, the speaking performances of the student-made podcast group improved more than the other two groups.

In summary, technologies have been significantly utilized to enhance language teaching and learning through blended learning. The flipped model is one of the popular methods up to date although its applications in second language teaching are scarce. Driven by promising results of previous research about the flipped model in teaching content subjects, this study attempted to investigate its effect on students' improvement in speaking English.

3 METHODS

The subjects of the study were 60 undergraduate students enrolled in two classes of General English 3 at Can Tho University in the five-week summer semester of the 2016 - 2017 school year. The participants were non-majored English students whose English proficiency were from the upper elementary to pre-intermediate level as judged by a placement test at the start of their entry into the university. Their ages ranged between 19 and 21.

The data of the study were collected from pre and post speaking tests, questionnaire and semi-structured interviews. The tests focused on the performance of contents and skills from the General English course including speaking conversational skills and answering prepared questions, which were composed by the Department of General English and English for Specific Purposes, School of Foreign Languages, Can Tho University, Viet Nam. The pre-test employed was selected from the test package of General English 2 so that the students were easily able to perform language of familiar topics without much practice. The post-speaking test topics were entirely relevant to what they learnt in the current course (General English 3) such as movies, technological devices, traveling and future jobs. The researcher did not utilize the same test due to the assumption that because of the students' low level of English, if the pre-test topics were quite new, the student would not produce any language at all. The assessment criteria involved

pronunciation, grammar, vocabulary, content, and fluency, adapted from the scoring scale model of Weir (1990). Two independent raters participated in assessment and finalized a test score soon after each student completed a speaking test in order to obtain the fairest and most reliable scores.

A sixteen-item questionnaire adapted from Hsieh *et al.*'s (2015) was also administered to survey the students' perceptions toward the flipped classroom instruction model in five main categories including motivation (4 items), effectiveness (5 items), engagement (4 items), flexibility (2 items) and overall satisfaction (1 item). The interview questions were generated basing on the categories addressed in the questionnaire to gain further insight into the students' perceptions.

Regarding procedures of the flipped classroom instruction employed in the experimental group, the students accessed target language input via videos and supplementary reading materials in advance of classes so that they could have sufficient exposure to the input. These documents were uploaded on a common social networking site e.g. Facebook platform which was also reserved for posting announcements and giving teachers' feedbacks on the students' questions. The videos contained sample conversations, vocabulary and grammatical lessons related to the topics as a good guidance for students' preparation and practices. To ensure that the students had enough time to process the learning materials, one week prior to each class meeting, the students were assigned to prepare conversations about the given topics in pairs based on the materials uploaded. In classes, the teacher briefly reviewed, answered the students' questions, gave feedback and facilitated students' speaking practices. In short, what the students had prepared before attending classes was quite aligned with in-class activities. In other words, there was a strong connection between in-class and out-of-class activities. The controlled group followed face-to-face class teaching.

4 RESULTS

4.1 Speaking performance

The tests result showed that the scale reliability coefficients of both tests were high (α =.969 and α = .967, respectively), which means that the tests were sufficiently reliable, and so were the data obtained from them. The data from the speaking tests (pre- and post- tests) was analyzed by SPSS to check the statistical difference between the two means of each test. The pre-test mean scores of the two groups were presented in Table 1.

Table 1: Mean scores of students' speaking performance before treatment

Descriptive Statistics				
	N	Minimum	Maximum	Mean
Pre-experimental	30	32.00	70.00	45.26
Pre-controlled	30	31.00	75.00	47.83
Valid N (listwise)	30			

The result of the independent sample t-test showed that the difference in speaking performance of the two groups before the treatment was not significant (t = .906, df = 58, p = .368), which means that the students' speaking performance in the two groups was the same before the treatment of the flipped classroom instruction.

The same formatted speaking test as a post-test was given to the participants of two groups after the intervention to examine its effectiveness. Figure 1 showed the mean score performance of both groups.

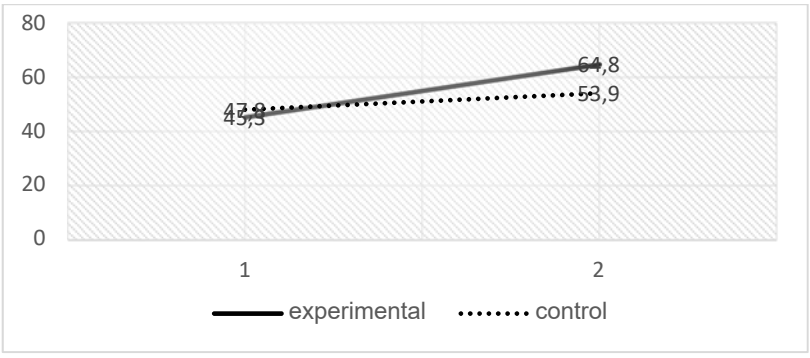

Fig. 1: Participants' speaking performance before and after the treatment

The line chart highlighted growth in students' speaking performance of both controlled and experimental groups after using flipped classroom instruction. In the control group, the mean score of the pre-test was around 47.8 and that of the post-test was approximately 53.9, which showed an increase of nearly 6 points. Similarly, the experimental group line revealed an increasing trend up to nearly 20 points ($M_{pre\text{-}test}$ = 45.3, $M_{post\text{-}test}$ = 64.8), which was by far higher than that of the controlled group.

The mean scores and standard deviations of the two groups were presented in Table 2. These results indicated that while both methods of instruction enhanced the participants' speaking performance, the students in the experimental group gained a higher score than the control group.

Table 2: Mean scores of students' speaking performance after the treatment

Descriptive Statistics								
	N	Minimum	Maximum	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Post - experimental	30	40.00	92.00	64.83	13.926	-3.254	58	.002
Post - controlled	30	35.00	88.00	53.93	11.942			
Valid N (listwise)	30							

The independent sample t-test result indicated a significant difference in participants' speaking performance of the two groups (t = - 3.254, df = 58, p = .002), which means that the speaking performance of the two groups was not the same. In other words, the results revealed statistically significant differences between the mean scores in favor of the students in the experimental group, and this improvement was largely attributable to the flipped instruction method of teaching.

4.2 Students' perceptions on flipped model

The questionnaire result showed that the scale reliability coefficient was considerably high (α = .880, N = 30), which means that the questionnaire was sufficiently reliable, and so were the data obtained from it. The students' overall perceptions of the flipped model were presented in Table 3.

Table 3: The students' perceptions of the flipped classroom instruction

		N	Minimum	Maximum	Mean	Std. Deviation
mean		30	2.75	4.38	3.75	.42595
Valid	(listwise)	30				

The general mean score of the students' perceptions in the questionnaire was M = 3.75, which is by far higher than scale 3 on the five-point scale of the questionnaire. This result means that the students had relatively positive perceptions towards the flipped model. Further exploration into students' motivation and engagement, the model's effectiveness, flexibility and overall satisfaction revealed the results as illustrated in Table 4.

Table 4: Descriptive statistics of the perception of the flipped model instruction

Categories	N	Min.	Max.	Mean	SD	N of items
Motivation	30	2.5	4.5	3.6	.52	4
Effectiveness	30	2	4.5	3.8	.45	5
Engagement	30	2	4.5	3.7	.57	4
Flexibility	30	3	5	3.8	.57	2
Overall satisfaction	30	2.5	5	3.9	.61	1

It is notable from Table 4 that most of the participants were satisfied with the flipped classroom instruction with the highest mean score of M = 3.9, SD=.61. Percentage analysis revealed that 70% of the participants agreed that the flipped model brought them satisfaction about learning. None of the respondents opted for the "disagree"

scale. Other categories were also perceived relatively positively, with mean scores ranging from 3.6 to 3.8. Specifically, the levels of effectiveness and flexibility were perceived similarly high (M=3.8 each). This is followed closely by engagement with 1 point lower. Although motivation had the lowest mean score (M = 3.6), it is higher than the average score and thus uncovers a rather positive perception of the participants.

Analysis of interviews provided further information about the students' overall flipped classroom learning experiences. The interview comments were analyzed for seven themes including motivation, effectiveness, engagement, flexibility, overall satisfaction, benefits and drawbacks of the flipped model.

As a whole, all four interviewees shared relatively positive attitudes or perceptions towards issues asked in the first six themes. When being asked whether the flipped model motivated them to learn English speaking skills, student A said, "*The provided videos gave me more motivation to learn since they offered a great deal of knowledge and communication skills. I felt excited and motivated with this learning method*". Regarding the effectiveness of the flipped model, most of the participants asserted that there were positive effects to some extents. Student B particularly commented, "*The flipped model improved my English speaking skills very much*". Most of the respondents answered that they felt engaged and satisfied with this new teaching method. Student C stated that the sample videos helped them understand the lessons better and then felt confident to participate in activities in the classrooms. They also reported that they could watch the videos any time and any place, and as many times as they wanted.

In terms of the benefits of the flipped model, once again the students asserted its effectiveness in enhancing their vocabularies related to the topics, getting them familiar with native speakers' pronunciation and intonation. More importantly, it helped them improve their English speaking skills. However, some drawbacks of this model were also indicated. The students complained about the fast speed of the talk with the speakers' reduction of sounds caused them difficulties in understanding the content. They also suggested English subtitles should be provided so that it would be easier for them to understand the materials. Even one student asked for a Vietnamese subtitle accompanied with videos.

5 DISCUSSIONS

The most notable findings of the study were that the students in the flipped classroom performed considerably better on the post-tests than those who followed the traditional instruction (without flip). The students were also really appreciative of the flipped instruction. Thus, the outcomes of the current study were compatible with previous research (Rivero, 2013; Avdic & Akerbloom, 2015). However, the most notable finding of the present study was the observed effect of flipping on students' English speaking improvement instead of content subjects as mentioned in the literature. It also confirmed the importance of integrating technology with traditional classrooms to enhance learners' academic achievement (Kırkgöz, 2011).

To be more specific, the findings suggested that General English students demonstrated an improvement in their scores in the post-speaking test. Although the speaking performances in both groups were not very high - just slightly above the average, the results favored the experimental group. This could be because the treatment lasted only five weeks. Indeed, the prior class preparation and instructional videos provided opportunities for students to master conversational strategies, vocabulary, pronunciation, and other communication skills to better perform in classroom activities. This finding could also be interpreted as the benefits of blended learning to create a learning environment that promotes better learning opportunities for students to improve performances (Mason *et al*., 2013; O'Flaherty & Philips, 2015). In addition, it is claimed that learners today highly appreciated computers and technology, and blended learning in general increased student-centeredness, motivation, and autonomy (Farah, 2014). In addition, the students also perceived their motivation, effectiveness, engagement, flexibility and overall satisfaction towards this model rather positively. It completely validated the use of flipped classroom instruction as it individualizes the pace of learning and increases teacher availability (Schultz *et al*., 2014).

It is noteworthy that the participants appreciated the benefits of the flipped model in enhancing their speaking performances, enriching their vocabulary resources, bettering their intonation and pronunciation as they heard native speakers on videos. This once again emphasized the importance of exposure to input in language teaching (Ellis, 1997) and of promoting interactive and communicative tasks (Nunan, 2004). However, the students claimed some disadvantages they encountered such as the fast speed of the speakers

which hindered them from fully understanding the conversations. In fact, the videos selected did not have such fast speed, but that was because of the limited listening abilities of non-major English students. That is also why one student even suggested a Vietnamese subtitle accompanied with the English ones. Moreover, it was not easy for the researcher to find videos covering relevant topics with suitable difficult levels and subtitle companion.

6 CONCLUSIONS

There has been a great deal of emphasis on the importance of using technology in language teaching. The results of this current study confirmed that blended learning in form of flipped instruction improved students' language learning, particularly speaking attainment. This method also engaged and motivated the participants in classroom activities; especially when they watched videos at home, they were able to respond to the tasks more effectively. With the flexibility of available advanced technology nowadays, students could watch videos any time, any places and as many times as they wanted. Although the experiment was short-term, and the focus was on learning achievement, together with other studies indicating the effectiveness of blended learning in the language learning and teaching as reviewed previously, this study provided further evidence of the effect of flipped classrooms on language learning. Future research could extend the experiment time and examine learner improvement in language proficiency in different skills and contexts.

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