



Flipped Learning in the English as a Foreign Language Classroom: Outcomes and Perceptions

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> Although many educators have recently discussed the positive effects of flipped learning, there is little empirical evidence about whether this approach can actually promote students' English learning. This study was undertaken in four sections of the same College English 1 (E1) course over two consecutive semesters at a South Korean university. A total of 79 students enrolled in the E1 course participated in the study. Of the participants, 39 learned English using a communicative language teaching approach, whereas 40 studied English in a flipped learning manner. Data were gathered from the students' achievements in three major tasks, their responses to three surveys, and the instructor's notes on the students' engagement in the process of their English learning. Findings demonstrate that the students in the flipped classroom achieved higher average scores in their final three tasks than those in the non-flipped classroom, but only the final examination mean score indicated statistical significance. However, surveys indicated that most students in this study seemed to enjoy learning English in a flipped learning environment. Also, the instructor found the students in the flipped classroom to be more engaged in the learning process than those in the non-flipped classroom. Pedagogical implications for effective English teaching are discussed.

doi: 10.1002/tesq.372

Communicative language teaching (CLT), which was born in the Cearly 1970s out of the need to develop communication skills, has been one of the most commonly employed teaching methodologies in English as a second language (ESL) and English as a foreign language

(EFL) contexts over the past 40 years. However, some scholars have noted that CLT has failed its intended goals, especially in many EFL settings, because it did not consider different contextual constraints in which language teaching occurs (Bax, 2003; Humphries & Burns, 2015; Kumaravadivelu, 1993; Li, 1998). Unlike ESL environments, EFL contexts provide few opportunities to use English outside of class time. Also, even in the CLT classroom, much class time is used ineffectively by instructors who explain concepts, often via lecturing, as students sit quietly and passively listen (Lee, 2009; Littlewood, 1999). As a result, students may receive insufficient "input, output, and interaction, particularly given the time constraints of a language class" (Spino & Trego, 2015, p. 3). Thus, creating preclass input materials can facilitate language learners in producing output (Pica, Lincoln-Porter, Paninos, & Linnell, 1996). Without comprehensible input (Krashen, 1982), students may not be able to actively participate in class activities.

A flipped learning approach, a newly emerged teaching methodology, has the potential to address the constraints of EFL contexts. It allows more time for students to use English inside and outside the classroom because of the inverted learning process (Bergmann & Sams, 2012). In a flipped classroom, lectures are removed, and the removed content is often delivered to students through preclass input materials like video recordings. However, flipped materials do not always have to be tied to technology (Brinks Lockwood, 2014). Students can study various types of materials (e.g., readings from a textbook and worksheets developed by their teacher) on their own outside of class time and grasp the meaning of the content. Based on their understanding, they consolidate their content knowledge by raising questions and engaging in class activities through group work facilitated by their instructor (Milman, 2012). Questions are generally regarded as indicators of constructing learner knowledge and creating interaction and participation (Dallimore, Hertenstein, & Platt, 2010).

Many instructors and researchers have discussed the benefits of flipped learning. For instance, Bergmann and Sams (2012), who have promoted the flipped learning approach, stated that the approach transcends physical constraints (e.g., time, space) and allows students to study class materials anytime and anyplace as long as an Internet connection is available. Bergmann and Sams also emphasized that "the flipped classroom is offering students an individualized education" (p. 18). Brinks Lockwood (2014) indicated that the flipped method could increase students' higher order thinking skills (e.g., application, analysis, synthesis, evaluation), as opposed to their lower order thinking skills (e.g., knowledge, comprehension), as identified by Anderson, Krathwohl, and Bloom (2001). After having applied the flipped model

to the Integrated Humanities subject in a Hong Kong Secondary 1 Class, Kong (2014) found that the new approach helped students increase their literacy competency and critical thinking skills.

Despite the recent attention to the flipped learning approach, there is little empirical evidence of how the approach has actually promoted students' learning (Chen, Wang, & Chen, 2014), especially in EFL classrooms. Reviews on flipped learning in first language (L1) classrooms (Butt, 2014; McDonald & Smith, 2013) pinpointed methodological limitations. That is, many flipped studies tended to rely on surveys to examine student perceptions of flipped learning, and others used single-group designs without control groups. Moreover, the reported L1 studies assigned video lectures as the main content for students to study outside the classroom.

To fill these gaps, this study examines the efficacy of the flipped model approach in an EFL course at a South Korean university by using an action research approach (Burns, 1999, 2005; Johnson, 2005). Instead of basing our study only on surveys, we collected data from various sources, including students' achievements in three major tasks, three surveys, and the instructor's observation notes on the students' engagement in class. We also created flipped and non-flipped sections and provided various types of preclass input materials for the students in the flipped section. In the following section, we turn our attention to the existing literature on flipped learning in both L1 and second language (L2) contexts.

Studies on Flipped Learning in the L1 Context

The effectiveness of flipped learning in K–12 and higher education in the L1 context has been well documented (Alvarez, 2012; Bergmann & Sams, 2012; Day & Foley, 2006; Findlay-Thompson & Mombourquette, 2014; Missildine, Fountain, Summers, & Gosselin, 2013; Moravec, Williams, Aguilar-Roca, & O'Dowd, 2010; Strayer, 2012). Many of these studies have reported positive outcomes of flipped learning. For example, Day and Foley (2006) examined the learning outcomes of the flipped model in an introductory human-computer interaction course for one semester. The participants were 46 students in two sections of the same course, one section using Web lectures and the other traditional lectures. The instructor assigned the lectures to be viewed before each class and used most of the class time helping students complete their work. The study revealed that the students in the flipped section achieved better average grades than those in the non-flipped section and showed a strong positive attitude toward the instructors' intervention in class.

In a dramatic illustration, Alvarez (2012), a writer for the National Education Association in the United States, reported on the positive effects of flipped learning. Clintondale High School, in Michigan, in the United States, suffered from high student failure rates in major subjects, such as English, math, science, and social studies, because of a high rate of absenteeism and a lack of sufficient class time to verify students' understanding of the lecture content. To improve students' achievements in those subjects, Rob Townsend, a physical science teacher, introduced the flipped model to the school principal, Greg Green, who eagerly accepted the teacher's suggestion and reached out to the community for technical support to flip the courses. As a result of flipping the major subjects, the students showed significant improvement in their grades and decreased failure rates compared to the previous year's final grades. The principal noted that "the flip approach holds the golden key for students because educators can control and eliminate learning obstacles, and it allows teachers to give their best presentations and share resources" (Alvarez, 2012, pp. 20–21).

However, this new approach has not always been found to promote students' learning. After having flipped three sections of an introductory business class at a Canadian university, Findlay-Thompson and Mombourquette (2014) found that the flipped model did not particularly aid students' learning. They taught one section in the flipped model and the other two classes in the traditional lecture style. Results showed that the students in the flipped section gained the same outcomes in their quizzes as those in the non-flipped sections. The interview data also revealed conflicting views on flipped learning. Many students stated that the flipped model allowed them to prepare for their lessons before class, ask many questions of the instructor and their fellow students, enjoy the hands-on work, and improve their grades. However, other students said that they preferred to receive instruction from their professor, not in a video format, and that the flipped classroom gave them too much work to do outside of class time.

Similarly, the students in Strayer's (2012) study provided somewhat less positive opinions about flipped learning. The author taught two introductory statistics courses using two different teaching methods: one section with the flipped learning mode and the other with a traditional lecture style. Instead of comparing the students' outcomes, the author used the College and University Classroom Environment Inventory (CUCEI), field notes, and focus group interviews to assess the learning environments of these two classrooms. The CUCEI showed that some students in the experimental classroom were not satisfied with how the classroom structure oriented them to the learning tasks in class.

As seen from the literature review above, despite the growing interest in the flipped model as a pedagogical tool among many L1 educators, the results are inconclusive. Although some studies indicate that it can facilitate students' study effort, learning process, and performance, others demonstrate that the approach is not always regarded positively by students. Also, L1 flipped studies suggest that teacher collaboration and commitment as well as technical support seem critical in flipping courses. As Strayer (2012) noted, more studies on flipped learning will identify the effectiveness of the method.

Studies on Flipped Learning in the L2 Classroom

Through the literature review, we found very few flipped learning studies with a focus on L2 contexts (Basal, 2015; Bauer-Ramazani, Graney, Marshall, & Sabieh, 2016; Hung, 2015). Among the published work, two studies drew our attention. The first one is Brinks Lockwood's (2014) study. Based on her experience of flipping an ESL classroom, she wrote a book called *Flip It! Strategies for the ESL Classroom*. Because she found the readings from the textbook she used interesting, rather than creating video lectures for every lesson, she included various types of class materials for the flipped content, including readings from the course textbook and publicly available videos. Also, assuming that her students previewed the course content at home, in class she was able to focus on improving her students' higher order thinking skills, which Anderson et al. (2001) refer to as essential in learning. Consequently, she observed that her students became more autonomous learners by taking increased responsibility for their own learning process.

The second study that drew our attention is Hung's (2015) recent investigation of the effects of flipped learning on EFL college students in Taiwan. Seventy-five freshmen majoring in English participated in the study. After creating three different groups—one full-flipped, one semi-flipped, and the third non-flipped—the author provided different instructions to each group: WebQuests to the full-flipped group, Ted-Ed to the semi-flipped group, and a traditional lesson to the non-flipped group. She reported that the students who received full-flipped lessons and semi-flipped lessons performed better than those who received traditional lessons. Also, the author claimed that the full-flipped and semi-flipped students demonstrated better attitudes toward their learning and made more effort in their studies. She concluded that the flipped approach is a promising pedagogy that could be applied across disciplines and contexts.

However, the study seems to have methodological concerns. One concern is that the researcher compared the effects of flipped learning among the three groups only after having provided three lessons over a 6-week period, which may not be a suitable amount of time to accurately assess the usefulness of flipped learning. The other concern is that the course we taught appears to differ in nature from the course to which Hung applied the intervention. For example, the materials used in our study were drawn from various academic sources, whereas Hung incorporated somewhat less rigorous academic material (i.e., movies).

The two studies noted above offered invaluable insight into how to apply the flipped model in our study, but questions remain about whether this methodology improves EFL students' academic language skills in a full semester.

In an EFL situation, English is not used as a means of communication in society but taught as one of the school subjects. Thus, students have few opportunities to receive language input outside the classroom. Also, as is typical in many EFL classrooms, despite the screening process based on various types of placement tests, students' English ability varies. Additionally, major South Korean universities mandate all instructors to conduct their lessons only in English, which complicates many students' understanding of the content. When students do not understand course content in the target language, they are likely to have a high level of anxiety and frustration (Horwitz, 2010; Sternfeld, 1997). Research has indicated that South Korean students in particular feel more anxious about speaking English in front of others (Truitt, 1995). Moreover, many language instructors feel that there is insufficient class time to provide individualized feedback on students' work. To provide more language input and feedback for students, accommodate the variation in their levels, and facilitate the challenges of the English-mediated lessons, we chose to implement the flipped learning model in our English course in the hope that the students would review lecture materials before class at their own pace. By moving the lecture content outside class, we could give students more individualized feedback on their work in class that they might not otherwise receive, even in the CLT classroom. The opportunity for instructors to act as a facilitator, a guide, and a resource, not merely as a lecturer (Brown, 2007), and to foster learner responsibility and participation was a large motivating factor in employing this new teaching methodology.

To examine the effects of flipped learning on South Korean college students' study of English, we formulated three research questions:

1. What were the effects of the flipped learning approach on South Korean college students' achievements in an EFL classroom?

- 2. How did South Korean college students perceive learning English in a flipped learning approach?
- 3. How did the flipped approach affect students' engagement in the learning process?

METHODS

This study employed an action research approach, which involves "any systematic inquiry into one's own practice" (Johnson, 2005, p. xi; see also Burns, 1999, 2005), through which we intended to improve our own practice by studying our own classroom, teaching methods, class activities, and students. In action research, as a teacher creates an intervention in a classroom, he or she also systematically collects and analyzes data. This research process is less predictable than other research approaches because it entails a spiral cycle of "planning, acting, observing, and reflecting" (Burns, 2005, p. 58). Therefore, some degree of subjectivity is assumed.

Setting and Participants

The study was undertaken in four sections of the same intermediate-level college English class at a South Korean university. The English program at the university offered four levels of English classes: Basic English (BE), English 1 (E1), English 2 (E2), and Advanced English (AE). E1 was the largest section, with approximately 50 classes, so most instructors in the program tended to teach one or two sections of E1 each semester. The number of students in each class was 20. The Test of English Proficiency (TEPS) developed by Seoul National University in South Korea was used for class placements. To take E1 classes, the students had to earn scores between 550 and 699 on the test. All class activities took place entirely in English.

A total of 79 students participated in this study. Thirty-nine students (30 male and 9 female; 37 freshmen and 2 seniors; 19 from the spring semester and 20 from the summer semester) were assigned to the non-flipped classrooms, whereas 40 students (31 male and 9 female; 38 freshmen and 2 seniors; 20 per semester) were placed in the flipped classrooms. To ensure the validity of the sampling process, we designated flipped and non-flipped sections prior to the start of the course. Because of the nature of course registration, random sampling was impossible. The students in the flipped sections were informed in the first week of their class that they would be participating in the

project. All of the students gave their consent to participate, and none of them opted out. Before matriculating into university, the students had studied English for about 10 years in their schooling in South Korea with a focus on grammar, reading, and listening skills. In the first survey, most students expressed that they did not feel confident in speaking and writing in English but that those skills would be important in their career. The survey also showed that no students had learned English in an English-dominant country at the time of the study. The students ranged in age from early to late 20s and came from various academic disciplines. The flipped and non-flipped groups appeared to be fairly similar not only in their English level but also in other variables, including the number of males and females, year of study, age, and English learning experiences.

The courses were taught by the first author, a nonnative English speaker, but she designed her curriculum in collaboration with the second author, a native English speaker. The first author earned her master's and doctoral degrees in foreign language education from a U.S. university. Having worked together at the same program for several years, we had developed various course materials and research projects, including BE and E1 writing and speaking lab manuals and other flipped projects. For instance, before this semester we had flipped the presentation section of our E1 classes to see the potential of applying the flipped model to our E1 course.

Course Description

The E1 classes in this study met either twice a week for 75 minutes in the spring semester or three times a week for 3 hours in the summer semester. Although the two semesters differed in the number of times they met per week, the total hours of instruction were the same (45 hours). The course was designed to improve the students' four skills in English, but it placed more emphasis on developing their academic speaking and writing skills. Most instructors of E1 classes employed a CLT approach because of the interactive nature of the lessons. Both groups in the study used the same course textbook, *Longman Academic Reading Series Level 3* (Miller & Cohen, 2014), which we chose because of its authentic academic texts. In addition to covering several chapters from the textbook, all E1 instructors were required to teach two presentations and two writing assignments for the term, with at least one of the assignments in each task taking a formal academic style.

The individual presentation and the group presentation differed in nature. For the individual presentation, which was assigned at the beginning of the semester, each student in both the flipped and non-flipped

classrooms was asked to give a 4-minute personal narrative about his or her life. However, for the group presentation, each student had to include more academic elements, such as making an argument and supporting it with outside sources. The group presentation was assigned during the last week of the semester, after the students had learned about academic discourse throughout the term. Given that most students had not experienced writing academic-style paragraphs in English, the instructor assigned two writing assignments consecutively before the group presentation. The first assignment was an opinion paragraph, where the students were asked to integrate one direct quote; the second assignment was a compare-and-contrast paragraph, in which they had to incorporate more outside sources (i.e., one direct quote and two paraphrases). We hoped that the sequence would help the students more successfully complete the two writing tasks and the group presentation because these two tasks share many common academic elements, including structure, language, and referencing. The two exams based on the textbook chapters, two paragraphs, and two presentations were the major tasks the students had to complete for the term.

Covering several textbook chapters as well as addressing basic academic writing and presentation skills is always a challenge for many instructors in the program due to limited class time. Most instructors usually lecture on the structure of a paragraph and a presentation and then review the assignment descriptions in class. Based on an instructor's lecture and guidance, the students should complete these tasks outside the class on their own. There is little or no time to provide individualized feedback on the process of the major tasks.

The students' lab work (10%) and attendance score (10%) were excluded from this study because the lab work was not taught by the instructor and the effects of the attendance score were difficult to measure. Major E1 tasks and their weight are outlined in Table 1.

Flipping the Course

After deciding to flip the course, through many discussions we reviewed the textbook chapters and chose four to cover for the term.

TABLE 1
College English 1 Major Assignments and Their Portion of the Final Grade (%)

Tasks	Exams	Presentations	Writings	Attendance	Lab work
Portion	40	15	25	10	10

Note. Attendance and lab work were excluded in the data analysis for this study.

Afterward, we created class materials (e.g., worksheets, videos). Instead of producing new videos for the course content, we recycled existing videos for the presentations and paragraph writing assignments we had created for another project in the previous semester. The presentation videos were recorded on a laptop by using the software Camtasia, and the paragraph writing videos were created by the university technical support team as part of a larger E1 writing manual project. The length of each video was approximately 15–20 minutes.

The students in both the flipped and non-flipped groups were provided with the same class materials except for the recorded lectures, which were explained in class to the non-flipped group. The students in the flipped class were told to watch the video lectures or readings and complete the worksheets before class, and in class, based on the preclass input content, the students were instructed to do various types of group work under the teacher's facilitation. In a typical 75-minute flipped classroom, the instructor used the first 10 minutes for welcoming and introducing the class agenda, another 15-20 minutes for checking the guided worksheets and clarifying questions about them, and the remaining 40-45 minutes for applying the content to their task through group work and for assigning new class materials. For example, in the class on paragraph writing, the last 40-45 minutes of class time was spent on the development of the students' paragraphs. While the students in groups were working on brainstorming ideas, making an outline, and writing up their draft, the instructor visited each group and provided feedback on the students' work. Conversely, in the same 75-minute non-flipped writing classroom, after the greeting the instructor presented the video content using PowerPoint slides for 20–25 minutes. The students then spent 10–15 minutes working in groups to complete the worksheets. Because of limited class time, the students had to produce their rough draft on their own outside class without receiving much feedback on their paragraph from their classmates and instructor.

Data Collection and Procedures

The data for this study came from various sources. First, the data came in the form of students' achievements in the three major tasks. Second, the instructor administered three surveys over the course of the semester for 5–10 minutes each time. At the beginning of the semester, the first survey was conducted to collect information on the students' English language learning history and their goals for the course. After the first three major tasks (i.e., individual presentation, first writing assignment, and midterm examination), the second survey

was given to examine the students' perception of learning English in a flipped approach. Toward the end of the semester, the third survey was conducted to gather the students' final opinions about the flipped learning method. The second and third surveys contained the same four questions on whether the students liked or disliked learning English in a flipped manner and explanations for their reasons, the number of times they viewed each video, the total amount of time they spent in studying the video, and their suggestions about the flipped learning approach. The second and third surveys were completed anonymously. Third, after each class, the instructor took field notes of both groups' engagement, including tallies of how the students interacted, what and how many questions they raised, and how they behaved in class. She frequently shared her observations with the second author. Fourth, although the students were placed according to their results on the TEPS, to establish a baseline from which to measure the effectiveness of the intervention, the students were guizzed on their English ability based on the first unit of study, which mirrored the two exams in that it tested vocabulary, reading, and writing skills on a smaller scale. In the test, the students in the flipped group earned the mean score of 1.61 in the spring semester and 1.74 in the summer semester out of 2 points each, whereas the students in the non-flipped group achieved an average score of 1.64 and 1.71 points, respectively. Therefore, there was virtually no difference in the students' English ability between the two groups.

Data Analysis

For data analysis, we employed both quantitative and qualitative methods. To compare the students' learning outcomes of the flipped and non-flipped groups, we used SPSS version 22 with a confidence level of 95% (p < .05). The comparison of the means between the two groups was verified using a two-tailed independent t-test. Levene's (1960) test was used to verify equal variances across the samples. The assignments that did not have equal variances were noted underneath the proceeding tables. We converted individual students' raw scores on these tasks to averages (out of 100%) to provide intra- and interindividual comparisons. Additionally, the students' surveys were both quantitatively and qualitatively analyzed. For example, we manually counted the number of times the students viewed/reviewed the videos and the total minutes they spent in studying the videos, whereas the students' perception of learning English in a flipped manner was vivo quoted or described through our lens. Moreover, the first author initially graded students' achievements on the paragraph and presentation assignments; the copies of the written paragraphs and the video recorded presentations were given to the second author without identifying whether the students were in the flipped or non-flipped classroom and then cross-checked and graded by the second author. The inter-rater reliability was 0.85 to 0.90. Also, to increase the inter-rater reliability of the study, before the grading of each assignment, we had a grade norming session for about 1 hour. Each time, three students' work was randomly chosen, and we graded it independently. After independent grading, we compared each other's set of grades.

Validity and Reliability of the Study

We evaluated the validity and reliability of the study in several ways. First, we triangulated the data by collecting multiple independent data sources. Second, as a nonnative English speaker and a native English speaker, we provided both an emic and etic perspective on the entire process from curriculum design and implementation, data collection and analysis, and writing. Third, working in the same program for a number of years, teaching the same E1 courses, and being engaged in several projects together, we could interpret the data more accurately. Fourth, throughout the project we had many meetings and discussions about what to flip and how to flip and shared our ideas and teaching resources and skills, which could serve as means of peer debriefing. Finally, we frequently visited existing literature on flipped learning to gain insight into it.

RESULTS

This section describes the students' achievements in the flipped and non-flipped classrooms and their perception of the flipped learning method, as well as the instructor's observations of the students' engagement in the learning process.

Students' Achievements

Overall, the students in the flipped classroom performed better in their final grades than those in the non-flipped classroom. As Table 2 displays, the average final grade of the students in the flipped classroom was 60.31 out of 80 points, whereas the students in the non-flipped classroom achieved an average grade of 57.19. However, these

TABLE 2 Flipped and Non-Flipped Classroom Average Final Grades

Type of classroom	N	M(SD)	t	p
Non-flipped classroom Flipped classroom	39 40	57.19 (8.56) 60.31 (7.97)	1.679	.097

TABLE 3
Flipped and Non-Flipped Classroom Average Exam Grades

		Midter	rm (15)		Final exam (25)					
Assignments (points)	N	M (SD)	t	p	M (SD)	t	p			
Non-flipped class Flipped class	39 40	9.54 (2.34) 10.00 (2.47)	.843	.402	17.55 (3.89) 19.44 (3.81)	2.172	.033			

TABLE 4
Flipped and Non-Flipped Classroom Average Writing Assignment Grades

		Paragraph 1	(10)		Paragraph 2 (15)			
Assignments (points)	N	M (SD)	t	p	M (SD)	t	p	
Non-flipped class Flipped class	39 40	7.66 (1.08) 7.61 (0.78)	274	.785	10.83 (1.99) 11.60 (1.71)	1.850	.068	

Note. Levene's (1960) test does not assume equal variance in the writing assignment (F, 4.163; p = .045).

results were found to be statistically insignificant (t = 1.679, p = .097). Tables 3, 4, and 5 show the learning outcomes of the major tasks (i.e., two exams, two writings, and two presentations) that the students completed throughout the semester. The students in both flipped and non-flipped classrooms did not reveal much difference in their average score on the midterm exam (i.e., 10 out of 15 points for the flipped group and 9.54 for the non-flipped one). However, in the final examination, the flipped students achieved much better mean scores than the non-flipped ones. As shown in Table 3, the mean score of the flipped class's final exam was 19.44 out of 25 points, compared to the mean score of 17.55 for the non-flipped classroom. This result was statistically significant (t = 2.172, t = 0.033).

The two writing assignments exhibited an interesting result. As Table 4 shows, in the first writing assignment the mean score of the flipped class was 7.61 out of 10 points, which was lower than that of the non-flipped class, 7.66. However, the second writing assignment showed opposite results. The mean score of the flipped students in

TABLE 5
Flipped and Non-Flipped Classroom Average Presentation Grades

		Solo pres	entation	(5)	Group presentation (10)				
Assignments (points)	N	M (SD)	t	þ	M (SD)	t	p		
Non-flipped class Flipped class	39 40	3.93 (0.64) 3.95 (0.46)	0.173	.863	7.67 (0.90) 7.72 (0.69)	.298	.766		

the second assignment was 11.60 out of 15 points, whereas the mean score of the non-flipped students was 10.83. In spite of the flipped class's increase in the second writing assignment, the result was not statistically significant (t = 1.850, p = .068).

Although the students in the flipped classroom gained a greater average mean score than those in the non-flipped classroom, especially in their final examination and second writing assignment, this level of achievement was not demonstrated in their presentations. As outlined in Table 5, the mean score of the individual presentation in the flipped class was 3.95 out of 5 points, which was slightly higher than that of 3.93 in the non-flipped class. In addition, the group presentation's mean score of the flipped class was 7.72 out of 10 points, while that of the non-flipped class was 7.67. This difference did not indicate any statistical significance.

Students' Responses to the Flipped Learning Approach

Out of the three surveys administered during the term, the second and the third ones focused on the students' responses to the flipped approach. When asked whether they liked or disliked learning English in a flipped learning approach and to provide their reasons, most students (36 out of 40) perceived the flipped learning approach as an effective means of learning English (see Table 6).

The following is a sample of the students' positive responses to the approach:

I think it's very successful for me. When lecture is provided by videos, I can easily review them because I can make a video stop or adjust to the speed.

Because of it [the flipped approach] I had more chance to talk in English and my fear of speaking English is gradually reduced.

TABLE 6
Student Response to the Flipped Learning Approach

	Stud	ent perception of flipped	l learning
Survey focus	\overline{N}	Like	Dislike
Mid-semester survey Final survey	40 40	36 36	4 4

Flipped way is interesting. Throughout the whole course, I think discussion in class is very interesting and makes me participate in class activities more.

I liked it because I received more feedback from my classmates and my professor. Flipped learning gave me more time to practice content.

I like it. By the flipped way, I can exercise more in class than by a conventional way.

Thanks to that [flipped method], I can study English more at home and easily.

The video for the paragraph writing had very good explanations and examples to understand a paragraph structure.

I do not feel very nervous because I prepared my homework [presentations] with my classmate in class. Flipped way is better because I applied my home learning in others.

Only four students in each survey did not particularly like the flipped learning method for the following reasons. Two students said that "flipped learning gave [them] too much homework to do" outside of class time, and one student noted that "video can be ineffective as there is no inspector for students while they're studying at home. Rather, an instructor's lesson is much more effective and easy." Also, one student commented that he or she would like to have a higher quality of audio and visual features along with interactive components, especially for the presentations. However, regardless of their negative comments about the flipped approach, all but one student said that they enjoyed learning English in the flipped classroom and expressed their appreciation for their instructor who flipped the course.

When asked to answer how many times they watched the videos for the presentations and paragraphs and how many minutes they spent studying the tutorial materials, the majority of the students responded that they viewed each video once or twice. However, as illustrated in Table 7, this number did not match with the total amount of time that the students spent studying the content of the tutorial. This discrepancy is due to the fact that many students reviewed the material by saving a screenshot of the recorded videos. For example, in the solo presentation, 19 students answered that they viewed the video once, from which one can infer 19 students spent 20 minutes to view the video; however, only three students noted that they spent 20 minutes in studying the video and 17 students said that they took more than 60 minutes to view the solo presentation video.

Overall, the surveys showed that the students spent less time studying simpler or recycled tasks, such as the solo presentation and the second writing assignment, compared to the amount of time on newer and more complicated tasks (i.e., the group presentation and the first paragraph writing assignment). That is, for the solo presentation, only four students spent more than 70 minutes studying the tutorial content; however, 11 students were found to have taken 70 or more minutes studying the group presentation materials. A similar studying pattern emerged in the writing assignments. A total of 11 students spent more than 70 minutes studying the opinion paragraph video, whereas five students spent the same amount of time reviewing the compare-and-contrast tutorial material.

Students' Engagement in the Learning Process

The students in the flipped classroom were found to be more engaged in the learning process throughout the term than those in the non-flipped classroom. First, the students in the flipped group raised more questions than those in the non-flipped group. Specifically, the former asked 12–15 questions per class (this number varied depending on situations, such as lesson content and the particular student's mood), but the students in the non-flipped classroom did not ask as many questions. For example, as they studied Steve Jobs's 2005 Stanford

TABLE 7
The Frequency of Viewing Each Video and the Minutes Spent in Studying Each Video

		Fr	equen eac	cy of ch vide		ng		N		s spen ach vi	it stud deo	ying	
Task order	N	0	1	2	3	4	0	20	30	40	50	60	70+
Solo presentations	40	0	19	16	2	3	0	3	14	4	2	13	4
Writing 1	40	0	17	15	8	0	0	3	8	4	2	12	11
Writing 2	40	1	20	15	4	0	1	3	15	4	2	10	5
Group presentations	40	0	18	15	4	3	0	2	15	4	2	6	11

commencement address, the flipped group was asked to watch the video at home and complete the worksheet we had prepared. In class, after checking the answers, the students had group discussions. In the discussions, the students raised various types of application and evaluation questions (e.g., "Do you agree with Steve Jobs's life philosophy?" "If Steve Jobs lived in South Korea, would he have succeeded?"). In contrast, in the non-flipped classroom, the students first watched the video in class and then were asked to answer the questions on the worksheet with their group members. After checking the answers, they did not have enough time to discuss the content as deeply as the flipped group did.

Second, the students in the flipped group appeared to be more invested not only in the process but also in their final products. At the beginning of the spring semester, the instructor expressed her concern about the flipped group's reserved nature in class, as opposed to the non-flipped group's outspoken and confident character. However, her concern dissipated several weeks later when the flipped group was more engaged. In addition to gaining higher scores in their final three tasks, throughout the remainder of the term the flipped group tended to seek more feedback from the instructor compared to the non-flipped group. For example, three or four students usually stayed with the instructor after each class for 20–30 minutes and asked many questions about the day's lesson.

Third, the students in the flipped classroom seemed to develop a deeper understanding of the content than those in the non-flipped classroom. For instance, when asked to complete the worksheets on one of the readings in Chapter 3 titled "Nutritional Studies: Food Rules"—where the author briefly noted the "dirty dozen" list (i.e., foods with high levels of pesticide residue) but did not mention its counterpart, the "clean fifteen" list—some students in the flipped classroom searched the Internet and discovered more information about these two lists and were able to apply this information to the South Korean context in the class discussions. In contrast, the non-flipped group did not go through any such in-depth process. Instead of doing research outside class, they completed the worksheets in class using the information presented in the textbook. Therefore, whereas the flipped group had richer explorations into the materials, the non-flipped group did not have such opportunities to delve into deeper levels of the content.

DISCUSSION

This study set out to explore the effects of the flipped learning approach on South Korean college students' achievements, perception

of the approach, and engagement in the learning process over the course of one semester.

The results indicate that the flipped group achieved higher average grades in their three final tasks (i.e., exams, writing assignments, and presentations) than the non-flipped group. However, only the mean score of the final exam was statistically significant. This finding is not surprising when we consider how actively, broadly, and deeply the flipped approach promoted the students in the flipped class to engage in the learning process throughout the term. As many students in the study noted, by previewing course content at their own pace as many times as they wished and by completing the worksheets before class, they had prepared for the lessons more thoroughly. Because of their own preparation and self-learning of the content, they were able to more actively participate in class and seek more feedback from the instructor than their counterparts. Their own preparation and active involvement coupled with personalized feedback from the instructor might contribute to higher average grades in the final three tasks. As seen in other studies (Alvarez, 2012; Bergmann & Sams, 2012; Day & Foley, 2006; Hung, 2015), as students achieve high scores in their tasks, they tend to positively perceive their instructor's intervention. In this regard, it might be fair to say that we observed the intended effects of the flipped model. That is, the model allows students to have control over their own learning and reinforces their comprehension, performance, and confidence through a cyclical process. In sum, although the study only indicates statistically significant findings in the final exam, we would argue that the flipped learning approach can be a promising teaching methodology to overcome many EFL contextual constraints noted earlier.

Contrary to Hung's (2015) finding that the full- and semi-flipped groups achieved higher average grades than the non-flipped group after only 6 weeks, this study suggests that South Korean EFL students need sufficient time to adjust to a new instructional mode because of the different learning environment. As researchers have stated (Lee, 2009; Littlewood, 1999), many East Asian students, including Korean students, are used to passively listening to lectures and therefore may be unaccustomed to being in an active and autonomous learning environment. As revealed in their exams and writing tasks, the flipped group's final exam and second writing assignment scores showed higher average mean scores than their scores in their midterm exam and first writing assignment. Also, as observed in the instructor's notes, especially at the beginning of the spring semester, students in the flipped group were more reserved than those in the non-flipped group. However, as the semester unfolded, the students' behaviors in

the two classes reversed. The students in the flipped section became more engaged than those in the non-flipped one. These findings could be attributed to the time needed to adapt to the new teaching approach.

The study indicates that the flipped students achieved better average mean scores in both presentations, but the differences were not significant. This nonsignificance may be explained in two ways. First, although the two presentation tasks shared common elements, the students might have felt that they had to prepare two distinct tasks because of the very different nature of the tasks: One was informal and narrative, and the other was formal and academic, Second, although we sequenced the final group presentation after the completion of the two writing tasks because of the shared elements, this study suggests that mastering academic presentation skills is a challenge for South Korean college students. Compared to the exams and writing tasks, which are generally completed in a less anxiety-provoking environment, presentations appear to have an added element of public attention and performance: standing in front of the class, receiving the sole focus of attention, and being assessed and recorded. This type of environment might have induced some degree of anxiety for presenters (Horwitz, 2010). As Truitt (1995) stated, South Korean EFL learners are more prone to high levels of anxiety when asked to speak in front of others. This could explain why there was no significant improvement in presentations.

CONCLUSION

Despite the overwhelming process of implementing the flipped intervention and the data collection and analysis, the flipping experience was rewarding for us as teacher-researchers. Particularly, just as Burns (1999) emphasized the importance of collaborative action research in language teaching, our collaboration throughout the project helped us closely examine our own teaching practice and reduce some level of anxiety and workload. However, if instructors plan to flip their classrooms, they should reflect on the following. First, to apply the flipped model, instructors need sufficient time to review their curriculum and decide on forms of class materials and assessment criteria. Creating visual materials (e.g., video-recorded lectures and editing them, teaching classes and observing students' engagement in class, keeping notes after each class, and reflecting on one's practice in particular all take extra time. Second, a few students commented that the online tutorials would be more effective if they included interactive components, particularly for the presentation videos, which were recorded by our own laptops. To ensure the quality of the video materials (e.g., resolution, sound) as well as the format compatibility (e.g., viewable on multiple devices), instructors need to communicate with the university tech support team and add such features to their recorded lectures. Third, instructors may consider setting up and/or reserving space in a computer lab where students can study the tutorials, thus avoiding issues of access. If instructors foresee issues pertaining to accessibility to the Internet, they may consider substituting online tutorials with printed and/or animated PowerPoint presentations (Brinks Lockwood, 2014). In conclusion, several factors, including securing sufficient time, quality of the online tutorials, and accessibility of the online tutorials, are essential for effectively implementing the flipped learning.

The students in our study had a relatively high level of English ability, were motivated, and possessed strong study skills. Therefore, we video-recorded all course content in English. However, if instructors are teaching learners with lower levels of English proficiency, they may consider scaffolding their lesson in different ways. Using students' first language (L1) according to their level of English is one type of scaffolding. For example, in the initial stage of the semester, instructors could produce more video lectures in their students' mother tongue, and as the semester progresses they could record more of them in English while providing subtitles in students' L1. Ideally, toward the end of the semester, all video lectures should be produced in English. As Sternfeld (1997) suggested, scaffolding in students' L1 can not only facilitate content learning but also reduce the anxiety and frustration of EFL students with low-level proficiency.

To assess the effectiveness of this approach, more studies on flipped learning in EFL classrooms are needed. Because the current study did not demonstrate statistical significance in the final writing or presentation tasks, it would be interesting to compare and contrast the results of the flipped and non-flipped model implemented in academic writing or presentation courses in courses other than a general English classroom. Furthermore, because the flipped group earned lower average scores than the non-flipped group in the first writing assignment but achieved higher average scores in the second one, we believe that the flipped students would likely achieve statistically significant scores in additional writing assignments if given more opportunities to practice such tasks in a flipped manner. Lastly, this study had a relatively low sample size, partly because of the nature of the action research approach and the small class size in our program. The low sample size might account for the statistical

insignificance of the data. If we increase the sample size, we might have more statistically meaningful results, especially in academic writing courses.

ACKNOWLEDGMENTS

We thank the two *TESOL Quarterly* reviewers for their comments and suggestions on earlier drafts of this article and the editors of the journal for their support. This article was supported by a research grant from Pai Chai University in 2017.

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