EFL Students' Perceptions of the Flipped English Language Classroom: A Case Study

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***Abstract*—This paper aims to investigate the feasibility of using the flipped classroom approach for university-level English-as-a-foreign-language (EFL) courses, with particular reference to college students' perceptions of the new model before it can possibly and successfully be implemented. A total of 310 students from the Applied Foreign Languages department at a university of science and technology in northern Taiwan participated in this preliminary investigation. Questionnaire surveys were conducted with a primary focus on various aspects of flipped teaching practice. Initial findings showed that participants generally had positive attitudes towards the new model. However, there were slight differences in their views between different demographic groups such as gender and sessions. Male students and evening students showed more interest in flipped learning than female students and day students, respectively. Additionally, possible English courses to adopt the flipped classroom approach were also recommended.**

***Index Terms*—flipped classroom, flipped learning, flipped teaching**

I. Introduction

In recent years, interest in the flipped classroom has proliferated at all educational levels. It was originally developed by two rural Colorado high school chemistry teachers, Jonathan Bergmann and Aaron Sams, who were concerned about busy students frequently missing classes for sports and other competitions. Therefore, in the spring of 2007, they began to record and post their lectures and demonstrations online for keeping the absent students from missing out on learning [1]. Then the flipped classroom, a new pedagogical model, was born. The new model differs from traditional teaching approaches in that the typical classroom lectures followed by homework activities in traditional teaching procedures are reversed in order, and often supplemented or integrated with instructional videos.

While the flipped classroom model has been claimed by Bergmann and Sams to be applicable to all subjects, its current practice mainly lies in science, technology, engineering, and mathematics, or the so-called STEM fields (e.g., [2]-[4]). Nonetheless, with the encouraging results reported in an increasing number of studies on flipped language classrooms (e.g., [5]-[7]), the new approach is now receiving more support from language educators (e.g., [8]). Various advantages of flipping the classroom, such as enhanced student engagement, increased classroom interactivity, and improved academic performance, have been noted (cf. [9]). However, concerns and doubts about the flipped approach remain (e.g., [9] and [10]). Milman has questioned the adequacy of flipping the classroom for second language (L2) learners and argued that it is best reserved for teaching and learning procedural knowledge [10].

Problems with the use of flipped classrooms in higher education have also been discussed. O'Flaherty and Phillips found from a comprehensive review of 28 papers that only very few studies demonstrated strong evidence to support that the flipped learning approach was more effective than conventional teaching methods [9]. Inconsistent claims have also been made about the effectiveness of the flipped classroom in the latest studies (e.g., [11]). Furthermore, despite an improvement in student grades, students might hold quite negative attitudes towards the introduction of flipped class (e.g., [12]-[14]). Findings in [15] even showed students' overall preference for traditional classroom delivery in an introductory psychology course.

Apart from the bottom-up research need, teachers at some universities in Taiwan have been given top-down pressure from the school authorities to undertake the flip. Due to the diverse issues mentioned above, the purpose of this study was then to investigate the feasibility of using the flipped classroom approach for university-level English-as-a-foreign-language (EFL) courses, with particular reference to college students' perceptions of the new model before it can possibly and successfully be implemented. More specific objectives are as follows:

(1) To understand the extent that students would like to be engaged in the flipped English language classroom activities from their own perspective;

(2) To realize the effects that demographic and background characteristics of the students have on their views;

(3) To find out possible English-related courses that students would like to take with flipped teaching.

II. Review of Related Literatrue

Although the practices of the flipped classroom have been implemented with slight variations, in a typical flipped classroom, students are directed to prepare for

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class by watching videos as a lecture substitute and use the freed-up class time for more active learning activities, facilitated by the instructor and peers [1].

The successful implementation of the flipped teaching depends on the support from both staff and students, especially the latter, who lie at the center of the whole learning process, featuring their watching video lectures before class, with follow-up discussions in class. Whether in synchronous or asynchronous learning activities, this model puts more responsibility for learning on the students, resulting in a student-centered learning culture.

However, students who are used to teacher-centered classrooms may not be accustomed to taking responsibility for their learning. According to [16], although students' perceptions of the flipped classroom were generally positive, they preferred face-to-face lectures to video lectures.

Individual differences exist in the classroom [17]. Various personal factors such as age, gender, and language proficiency might have effects on language learning outcomes [18], especially gender, which has been found to play a role in academic achievement (cf. [19] and [20]).

While one hallmark of the flipped classroom is previewing materials before class with the use of technology [1], the variables, such as technology self-efficacy, motivation for learning, learner control and self-directed learning, in-class communication self-efficacy, and doing previews, might influence students' flipped learning readiness [21].

Furthermore, Hao also found that study time was positively associated with the dimensions of learner control and self-directed learning, in-class communication self-efficacy, and doing reviews, and could be used to predict these associated dimensions [21]. Besides, college students' study habits have already been found to be associated with student performance [22].

III. Methods

This research was designed as a case study, which is "an intensive description and analysis of a phenomenon or social unit such as an individual, group, institution, or community" [23].

A. Participants

A total of 310 students from the Applied Foreign Languages department at a university of science and technology in northern Taiwan participated in this preliminary investigation. All the participants were English majors.

Among the participants, 219 or 70.6% students were enrolled in the day session of the department and 91 or 29.4% students were in the evening session. With respect to gender, there were 230 or 74.2% female students and 80 or 25.8% male students. The female-to-male ratio was about 4 to 1. Regarding the level of year, there were 96 or 31.0% freshmen, 86 or 27.7% sophomores, 91 or 29.4% juniors, and 37 or 11.9% senior students. As for their English proficiency level, most of them were lower-intermediate language learners (71.3% below TOEIC score 550), with an average of 10 years of experience in formal English education. Additionally, 104 or 33.5% participants had experience of flipped learning (Please see Table I for more details.).

B. Instruments

Data used for this study were collected from questionnaire surveys. The questionnaire used for surveys consists of three sections. The first section includes questions designed to elicit demographic information from the students. The second section mainly contains 8 question items designed to elicit study habits with a 4-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (4). The third section comprises 19 question items with a 4-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (4), with a primary focus on students' views on the flipped classroom approach.

C. Data Collection and Analysis

Questionnaire surveys were conducted in class with the permission of instructors during the academic year 2015-16. Participation in the surveys was voluntary, and no extra credit was offered to the students.

Quantitative statistical analyses such as the mean and percentage, t-tests as well as ANOVA to examine the differences between demographic information and question items were computed by means of the statistical software Statistics Package Social Scientist (SPSS). Besides, for the survey validity, the Cronbach Alpha reliability was computed for internal consistency of the 8 question items in the second section of the questionnaire and that of the 19 question items in the third section. The alpha coefficient for the 8 items and that for the 19 items are .798 and .856, respectively. Both are considered highly reliable [24].

TABLE I. Participants' Demography (*N=310*)

Items	*n*	*%*
Session		
Day	219	70.6
Evening	91	29.4
Gender		
Male	80	25.8
Female	230	74.2
Level of year		
Freshman	96	31.0
Sophomore	86	27.7
Junior	91	29.4
Senior	37	11.9
English proficiency (TOEIC)		
Not applicable	20	6.4
Below 250	32	10.3
251~350	51	16.5
351~450	64	20.6
451~550	74	23.9
551~650	49	15.8
651~750	13	4.2
751~850	2	0.7
Above 851	5	1.6
Experience of flipped learning		
Yes	104	33.5
No	206	66.5

IV. Results and Discussion

Results will be discussed in terms of the three research objectives mentioned in the introductory section, namely (1) to understand the extent that students would like to be engaged in the flipped English language classroom activities from their own perspective; (2) to realize the effects that demographic and background characteristics of the students have on their views; (3) to find out possible English-related courses that students would like to take with flipped teaching.

A. Research Objective 1: To Understand the Extent That Students Would Like to Be Engaged in the Flipped English Language Classroom Activities from Their Own Perspective

In general, students had positive attitudes towards the flipped classroom approach (please see Table II for more details). However, they also had negative perceptions of certain aspects (please see the marked areas in Table II). First, more than half of the participants reported that it would be easy to get distracted during watching the videos (58.8%). Second, although most participants liked to discuss issues with their classmates in class (78.4%), they disliked expressing themselves in front of all the students in the classroom (58.0%). Third, almost two-thirds of the participants preferred traditional face-to-face lectures rather than watching instructional videos on their own (63.9%). Finally, as far as future teaching methods were concerned, an overwhelming majority still hoped that traditional face-to-face lectures would remain in the classroom in the future (71.3%). These views addressing key issues of the new model suggest concerns and doubts of the students, which should be carefully dealt with before the flipped classroom approach can possibly and successfully be implemented.

B. Research Objective 2: To Realize the Effects That Demographic and Background Characteristics of the Students Have on Their Views

Demographic information collected includes gender, sessions, levels of year, English proficiency, and experience of flipped learning, as shown in Table I. Only the former two features, namely gender and sessions, show significant effects on students' views, based on the statistical results (i.e., $t(307) = 2.365$, $p < .05$; $t(307) = -3.170$, $p < .01$, respectively). Besides, since the mean of male students (M=2.7572, SD=.36823) is higher than that of female students (M=2.6519, SD=.33395), then male students show more interest in the flipped classroom than female students. This result disagrees with the findings of other studies in which gender is not an issue in technology-integrated learning environments (e.g., [21], [25], and [26]).

TABLE II. Overall Views on the Flipped Classroom (N=310)

No.	Items	SA/A	SD/D	*Mean*	*SD*
3	I think that the flipped classroom would be a good way of learning.	74.2%	25.8%	2.83	0.65
13	The flipped classroom approach would save my time and energy in learning.	70.3%	29.7%	2.83	1.29
11	The flipped classroom learning would be effective for me.	64.8%	35.2%	2.69	0.60
14	The flipped teaching would answer my learning needs.	62.9%	37.1%	2.68	0.63
15	The flipped classroom would make me want to learn more.	60.6%	39.4%	2.65	0.64
6	I think that courses with flipped teaching are meaningless.	32.3%	67.7%	2.28	0.70
1	I could learn from video lectures.	90.0%	10.0%	2.99	0.50
9	I like to learn through the video lectures.	73.2%	26.8%	2.88	1.31
2	I would be taking notes if I were watching the videos.	71.9%	28.1%	2.80	0.67
5	I think that it would be easy to get distracted if I were watching the videos.	58.8%	41.3%	2.66	0.78
16	Questions and answers between the teacher and students in class would be helpful for my learning.	87.7%	12.3%	3.03	0.54
17	Discussions in class would make me have a better performance on exams.	81.6%	18.4%	2.97	0.61
7	I like to discuss issues with my classmates in class.	78.4%	21.6%	2.91	0.61
8	I like to express myself in front of all the students in class.	41.0%	58.0%	2.30	0.79
4	I think that the flipped classroom would be more efficient than traditional teaching methods.	65.5%	34.5%	2.75	0.72
12	The flipped classroom approach would make me learn more things than traditional teaching methods.	60.3%	39.7%	2.65	0.62
18	I hope that the flipped classroom approach can be adopted to replace other teaching methods in the future.	58.1%	41.9%	2.61	0.69
10	I prefer traditional face-to-face lectures rather than watching the videos on my own.	63.9%	36.1%	2.74	0.74
19	I hope that traditional face-to-face lectures will remain in the classroom in the future.	71.3%	28.7%	2.83	0.68

Note. SA (strongly agree) = 4; A (agree) = 3; D (disagree) = 2; SD (strongly disagree) = 1.

As far as the session is concerned, since the mean of the evening session (M=2.7750, SD=.34229) is higher than that of the day session (M=2.6398, SD=.34002), then evening students have more interest in the flipped

classroom than day students. Evening college students are generally believed to be academically low achievers in Taiwan. They end up continuing their higher education in evening schools partly because they fail to do well in high schools or in the college entrance examinations. Thus, they cannot choose but go to evening schools usually with lower admission requirements. The analysis of factors regarding educational achievement is not a simple issue. Family's socioeconomic status might have a significant effect on high school students' academic achievement [27]. Continuing higher education for finding a better job is widely perceived as a way out of their status quo.

C. Research Objective 3: To Find out Possible English-related Courses That Students Would Like to Take with Flipped Teaching

Watching video lectures can be considered as the most important prerequisite to the success of flipping classrooms. Students who habitually prepare before class tend to prefer flipped learning (based on the ANOVA results: $F(3, 305) = 9.059$, $p < .01$).

Table III shows a comparison of course preference for preparation before class between traditional and flipped teaching. While the English-related courses for which students would like to prepare vary a lot with the traditional teaching, *English listening and speaking* as well as *English for life* are top two courses that students would like to watch videos before class with flipped learning (41.2% and 36.1%, respectively). In other words, students prefer to learn other courses such as *English grammar*, *English writing*, and *Chinese-English translation* through traditional face-to-face lectures.

TABLE III. COMPARISON OF COURSE PREFERENCE FOR PREPARATION BEFORE CLASS BETWEEN TRADITIONAL AND FLIPPED TEACHING

Courses	Traditional Teaching	Flipped Teaching
English listening and speaking	21.2%	40.2%
English for life	24.1%	36.1%
English grammar	19.5%	9.5%
Chinese-English translation	14.7%	6.4%
English writing	14.7%	6.2%
Others	5.7%	1.6%

V. CONCLUSIONS

This paper has reported on a preliminary investigation of college students' perceptions of flipped teaching. Findings have showed that the majority of students had positive attitudes towards the flipped classroom approach in general but that they also hoped that traditional face-to-face lectures would remain in the classroom. There are differences in students' perceptions between different demographic groups. Male students and evening students showed more interest in flipped teaching than female students and day students, respectively. *English listening and speaking* as well as *English for life* are two courses which could be recommended to teachers to adopt the flipped teaching. Findings from this study might be limited to the participants here; however, generalization could also be made to other college students with similar backgrounds in Taiwan.

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