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EURASIA Journal of Mathematics Science and Technology Education ISSN: 1305-8223 (online) 1305-8215 (print) 2017 13(8):4995-5007 DOI: 10.12973/eurasia.2017.00978a



TELL us ESP in a Flipped Classroom

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Received 5 May 2017 • Revised 6 July 2017 • Accepted 7 July 2017

ABSTRACT

Technology Enhanced Language Learning (TELL) via e-learning systems and the Internet, encourages language learners to develop language ability in a more effective way. The flipped classroom is one of the contemporary pedagogical methods. This research experimented with an innovative flipped classroom approach in an undergraduate English learning course for specific purposes, along with investigated the value of using flipped classroom strategy. In the new instructional model of flipped classroom, it further provided a more effective connection between traditional flipped in-class and out-of-class activities via other on-line learning activities from school's eLearning platform. This research aims to identify whether this innovative approach is a positive experience for students. The findings indicate that the impact on the student experience is significantly positive and with a higher level of satisfaction by students especially for those students who have TOEIC test experience before. Moreover, the further on-line tutoring and supporting resource were also addressed in a positive learning experience. This paper offers implementation recommendations for an innovative flipped curriculum and materials design for ESL/EFL teachers in ESP.

Keywords: flipped classroom, TELL (Technology Enhanced Language Learning), ESP (English for Specific Purposes), higher education, SEM (structure equation modeling)

INTRODUCTION

"Flipped Classroom" also known as "Flipped Learning", "Flipped Teaching", or "Inverted Classroom". The term of "Flipped Classroom" originated in 2007 in the United States, Colorado, two chemical teachers, Jon Bergmann and Aaron Sams. In order to solve the problem of students often absent, and help students to make up classes, they start using the screen capture software to write PowerPoint presentations and narration, and students download for self-studying. Then they found that the model has been effective, so further to allow students to watch the film at home to preview the teaching materials, and then design interactive learning activities, such as discussion, practice, problem solving and individual guidance to complete the work in the classroom.

Flipped classroom approaches have been the subject of much popular attention recently, and the Flipped Learning Network [FLN] was initiated in 2012 by widely recognized pioneers including Jon Bergmann and Aaron Sams (Bergmann & Sams, 2012). FLN has defined this concept as a pedagogical approach where the learning space is shifted from group learning inside the classroom to individual learning without limiting to the classroom. According to FLN community resource, the flipped classroom approach has been applying in many different fields,

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State of the literature

- Technology Enhanced Language Learning (TELL) and Computer Assisted Language Learning (CALL) articles are published increasingly and has become "normalized".
- The current mainstream of English teaching can be divided into EGP (English for General Purposes) and ESP (English for Specific Purposes).
- Flipped classroom approaches is commonly defined as an instructional model in which students viewed
 the learning content before class through instructor-provided video lectures, and in-class time is used for
 student-centered active learning.

Contribution of this paper to the literature

- There are a few articles pay attention to ESL/EFL courses in the fields of flipped classroom approach, but no article focus on the preparation course of English proficiency test.
- The students who had been taken TOEIC show more motivation on flipped classroom learning, get more
 involvement in flipped classroom approach, and have higher satisfaction on the flipped classroom model.
 In the new instructional model, it further provided a more effective connection than traditional flipped
 classroom via other on-line learning activities from school's eLearning platform, such as the online tutoring
 for extra practice questions.
- The statistics analyses of the data about the impact of flipped classroom approach were conducted using structure equation modeling (SEM).

such as Social Studies and History, Math, Fine Arts, Science, English, Special Education, and even Phys Education. But how much research has been done on flipped learning? Robert Talbert (2016) made a timeline that shows when the major publications and events happened in flipped learning's 20-ish year lifespan so far. The result shows that peer-reviewed research papers in Education Resources Information Center (ERIC) have "flipped learning", "flipped classroom", or "inverted classroom" in either the title or the abstract were firstly published from 2000 (two articles about inverted classroom), growing from 2012 (two articles about inverted classroom and three articles about flipped classroom), and surprisingly developing from 2015 (sixty-eight articles about flipped classroom, fourteen articles about flipped learning, and seven articles about inverted classroom). The author of the study further investigated peer-reviewed research papers in ERIC in the year of 2016 and the first half year of 2017. The result showed that there are eighty-six articles about flipped classroom, thirty-nine articles about flipped learning, but no article about the inverted classroom. The total amount reaches one hundred and five articles that prove the issue's rapid growth and the influence. However, no article focused on the preparation course of English proficiency test. Therefore, the author of the study implemented the flipped classroom approach in a TOEIC preparation course and intended to investigate the students' attitudes and perceptions towards their flipped instructional experiences and their suggestions for improving the teaching and learning effectiveness in the flippedlearning course. This paper describes a preliminary study of the use of a flipped classroom model with a TOEIC preparation classroom at a private university in the Southern Taiwan.

The objectives of this study are:

- (1) To create a process for using the flipped learning approach in the TOEIC preparation course.
- (2) To enhance the English language teaching-learning process by mapping it to the flipped classroom model.
- (3) To explore the influence of learning effectiveness and students' perspective of applying the flipped classroom approach to teaching English language in the TOEIC preparation course.
- (4) To understand the satisfaction of college students using the flipped classroom model with e-learning platform to carry out the English language learning.

LITERATURE REVIEW

The case study experimented with a flipped classroom approach in an undergraduate English learning course for specific purposes, along with investigated the perception of the value of using flipped classroom strategy and e-learning platform.

Flipped classroom

The flipped classroom is commonly defined as an instructional model in which students viewed the learning content before class through instructor-provided video lectures or other pre-class learning materials outside the classroom, and in-class time is used for student-centered active learning, such as problem solving, collaborative work, laboratory experiments, field trips, and creation (Long, Logan, & Waugh, 2016).

With compare to the traditional instructor-centered and lecture-based instructional model, the presentation of the initial learning content is completed before class in the flipped classroom model. There are two main phases in the flipped classroom model. A self-directed learning phase in which students interact with instructor-provided learning materials, and then the second phase of the flipped classroom instructional model is the active learning experience that occurs during the in-class time.

Technically speaking, the flipped classroom model is often used to refer to the students' activities that watching recording material at extracurricular time, and doing homework practice in class time. From the concept, the flipped classroom approach is to ask students to do pre-class preparation, in order to take the initiative to participate in classroom learning activities.

McNally et al. (2017) summarized four key elements of what constitutes a flipped classroom:

- 1. An opportunity for students to gain exposure to content prior to class (e.g., recorded lectures)
- 2. An incentive for students to prepare for class (e.g., pre-class quizzes)
- 3. A mechanism to assess student understanding (e.g., graded pre-class quizzes)
- 4. In-class activities that focus on higher-level cognitive activities involving active learning, peer learning and/or problem-solving

In the flipped classroom, students can watch the video according to their preferred time and need, and they can study at their own pace. They also will have more time to solve problems individually or collaboratively with peers.(Zainuddin & Halili, 2016)

In flipped classroom approach, classroom activity is spent on application and higher-level of learning rather than listening to lectures and other lower-level thinking tasks. (Nederveld & Berge, 2015) According to the theory of Bloom's revised taxonomy of cognitive domain, the lower levels are presented before class through instructor-provided video lectures, and higher levels of learning from application to evaluation can be spent working in-class time. Thus, in flipped classrooms, students go from the remembering knowledge of lowest-level learning before the class, to achieve the evaluation and creation of highest-level performance in the class.

As stated in the research review of Zainuddin & Halili (2016), various studies in flipped classroom from 2013 to 2015 showed different fields of studies, but just only one article related to English language from Hung (2015). After that, Sam, D. P. (2016) applied the natural approach in teaching English language to tertiary level engineering learners in a flipped model. From the author's further investigation in the year of 2016 and the first half year of 2017, there are just fifteen articles (12%) pay attention to ESL/EFL courses. These research includes first-year college students' experiences in the EFL flipped classroom (Zainuddin, Z., 2017), the use of the "Flipped Classroom" pedagogy in secondary English language classrooms (Yang, C. C. R., 2017), using the flipped classroom to enhance EFL Learning (Chen Hsieh, et. al., 2017), the flipped experience for Chinese university students studying English as a foreign language (Doman, E., & Webb, M., 2017), a case study of the flipped classroom in a Korean University General English course (Choe, E., & Seong, M. H., 2016), the flipped classroom strategy in teaching English grammar on EFL school (Al-Harbi, S. S., & Alshumaimeri, Y. A.,2016), learning outcomes in ESL/EFL contexts (Webb, M., & Doman, E., 2016), the effect of the flipped classroom model on Egyptian EFL students'

listening comprehension (Ahmad, S. Z. , 2016), EFL flipped classroom teaching model on graduate students' English higher-order thinking skills (Alsowat, H. , 2016), present research on the flipped classroom and potential tools for the EFL classroom (Mehring, J. , 2016), a flipped English classroom intervention on high school students' information and communication technology and English reading comprehension (Huang, Y. N., & Hong, Z. R. , 2016), flipped learning in TESOL (Bauer - Ramazani, C., et al., 2016), corpus use in enhancing lexico-grammatical awareness through flipped applications (Karaaslan, H., 2016), one high school English teacher: on his way to a flipped classroom (Shaffer, S. , 2016), CALL communities & culture (Papadima-Sophocleous, S., et. al., 2016).

Most research testing the effectiveness of the flipped classroom studied and identified students' perceptions through a survey. Their research demonstrated that flipped classroom approach brought positive impacts toward students' learning activities such as achievement, motivation, engagement, and interaction (AlJaser, A. M., 2017; Kostaris, C., et. al., 2017; Zainuddin, Z., & Halili, S. H., 2016). The other research result from McNally et al. (2017) also addressed that students felt they had participated more actively and attentively in class activities; they also achieved better grades in their specific course. The study of Bhagat et al. further revealed the flipped classroom mode can help low achievers to improve their performance in mathematics (Bhagat, Chang, & Chang, 2016).

Technology Enhanced Language Learning

Computers have been used for language teaching since 1960's. As far back as 1998, Warschauer and Healey described the historic development of Computer Assisted Language Learning (CALL) research, linking shifting emphases to pedagogical theories (Warschauer & Healey, 1998). Technology Enhanced Language Learning (TELL) and Computer Assisted Language Learning (CALL) articles are published increasingly in mainstream journals and has become "normalized" (Stickler & Shi, 2016). The advantages of using computer technology for language learning in the contemporary world is that language learners can learn or practice language not only through software installed in computers but also through e-learning systems and the Internet accessible by computers or mobile devices at school or home. E-learning systems and the Internet from the technology support, encourage language learners to develop language ability, improve language skills, and allow learners to interact with peers and obtain online consultation and feedback from teachers through computers, and learn the target language in a free virtual environment according to their learning pace, time, interest and needs (Lee, Yeung, & Ip, 2016).

Technology tools like as computers and mobile devices, were seen as a more efficient tool to accomplish unchanged purposes of displaying certain L2 target items or demonstrating skills for students to practice. Moreover, the learner-generated context, any kinds of resources such as texts, links, photos, movies, or sound files that learners encounter, record or edit, inside or outside of their classrooms, could be utilized as learning resources by uploading them to sites where they connect with others online, would be shared socially, discussed with other learners, and exploited for L2 acquisition (Pachler et al., 2010).

Technology and computer-mediated communication not only provides learning tools and a gateway to the discourse community, also provides opportunities for collaborating, creating virtual environments and online courses, and fostering learner autonomy (ARNÓ-MACIÀ, 2012).

However, the study of Muhametjanova and Cagiltay (2016) also revealed that there are a number of barriers preventing effective integration of technology into instruction, such as lack of time, lack of equipment, and lack of training. Especially the instructors wished to integrate technology into instruction, but needed specific training and technical support from the university administration.

English for Specific Purposes (ESP)

Generally speaking, English for Specific Purposes (ESP) has been seen as part of English Language Teaching (ELT), and the current mainstream of English teaching can be divided into EGP (English for General Purposes) and ESP (English for Specific Purposes) (Dudley-Evans, T., & John, M. J. St., 1998). In Bracaj's research (2014), ESP was defined as three types: cultural-educational, personal and individual, and academic/occupational. ESP is designed to meet the specific needs of learners, the content of the activities and materials as well as the

language instruction may focus on specific fields. Robinson (1991) stated that ESP is normally goal directed. That is, students study English not because they are interested in the English language (or English-language culture) as such but because they need English for study or work purposes (Xu, 2012). English has been widely used as the language of international business. Therefore, many universities in Taiwan plan English courses for a specific purpose.

In this study, an English proficiency test preparation course is regarded as an ESP course. The course is designed for helping students familiarized with test strategies for one of English proficiency tests, Test of English for international communication (TOEIC). The Test is used by organizations to determine whether an employee is suitable for a particular task. The TOEIC preparation course not only builds the English skills students need for success in the workplace but also prepares students to do their best on the TOEIC Listening and Reading test.

METHOD

The most instruments used in the flipped classroom research was survey (28%), followed by testing course (28%), interview (14%), observation (7%), existing test score (5%), document analysis (5%), and analysis of logs system (2%) (Zainuddin & Halili, 2016). This paper describes a preliminary study of the use of a flipped classroom model with a TOEIC preparation classroom at a private university in the Southern Taiwan. This study surveyed 33 undergraduate junior students (75.8 % female) participating in a TOEIC preparation course with flipped teaching environment in which the student sample was enrolled.

The TOEIC preparation course

This paper describes an undergraduate TOEIC preparation course that was "flipped" with most of the content delivery moved online and class time devoted to test-taking strategies application and practice. The course is a one semester, two hours per week, undergraduate, and typically for the junior student they need the English ability certificate for job hunting in the near future. It is organized by the department of tourism management, thus most the students who taking the course are the student of the department of tourism management. Course content includes the strategies for TOEIC listening and reading test, related vocabulary, and language usage practice. The course is taught in a computer lab by one eight-year experienced instructor who has a master degree in curriculum and instruction, and major in EFL. The institution is a private four-year university with an enrollment of approximately 15000.

Outside-of-class Activities

- (1) PowerCam video: an approximately 30-minute video with narration and screen-capture demonstrating step-by-step how to use test strategies to perform the TOEIC test well.
- (2) PowerPoint slides: a slide presentation discussing the test topics, including 8 topic-based skill building units.
- (3) TOEIC sample test: one full TOEIC test for practicing along with test strategies on video.
- (4) Online practice questions tutoring and discussion: Online tutoring for extra practice questions.

In-class Activities

- (1) Vocabulary extending activities: Extending practice activities including online quizzes on e-learning platform to build up vocabulary for real-life workplace scenarios.
- (2) Problem-solving: students work alone, with peers, or with help from the instructor to practice their test skills, complete test questions and be familiar with TOEIC test format (that would traditionally have been homework after the in-class lecture)
- (3) Intermediate exams: Assessment of the student's ability to perform TOEIC test with a full authentic TOEIC Listening and Reading test after test strategies training, and the instructor gives the test review after the exam.
- (4) Final exam: Students take the formal TOEIC test at the end of the course.

The participants

There are 33 undergraduate junior students (75.8 % female) participating in a TOEIC preparation course with flipped teaching environment in which the student sample was enrolled. The students were eligible to participate based on their enrollment in the course in which the instructor had indicated to the research team that they were implementing a flipped classroom environment. All the students participated in the interview voluntarily. The students were also informed that their participation, rejection, or withdrawal from the interview would not affect their grades in this course.

Data collection

The data of the study are collected from the interview, online questionnaire, and participants' test scores.

An individual, face-to-face, semi-structured interview was conducted with participants. The interviews varied in length from 30 to 45 minutes. All the interviewees gave informed consent for audio recording of the interviews and were also informed about the purpose of this study. Each recording was transcribed and then destroyed. The student's interview questions were about their experiences in the pre-class and in-class learning activities, their attitudes toward learning in the Flipped-learning, difficulties with respect to their learning performance and motivation, and their suggestions for improving the course.

The online survey took approximately 15 minutes to complete. All aspects of the research were conducted in accordance with University and national ethical guidelines. Participants completed an online questionnaire measuring a number of variables concerning their experience of the flipped classroom environment as well as demographic and study variables. Perceptions of flipped learning experience were assessed by twelves items, respectively. Attitudes towards material characteristics of the instructor-provided video were assessed by nine items. Attitudes towards technology acceptance about human-computer interaction, and perceived usefulness of the e-learning platform were assessed by totally thirteen items.

This questionnaire is based on previous work on using the flipped classroom to enhance EFL learning by Chen Hsieh et al. (2016) and on learning effectiveness of emotion management for college students through the application of a multimedia mobile learning system by Chang Wan-Jan & Yeh Zong-Mu (2014). These items were chosen based on the outcomes typically intended through activities in a flipped classroom approach (Bishop & Verleger, 2013; Strayer, 2012), the technology acceptance model (Venkatesh & Davis, 1996), and were piloted in the previous semester to ensure the appropriateness of phrasing as well as other characteristics. Participants were required to respond on a 4-point Likert scale, ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). The means of these items were calculated so that higher scores represent more positive attitudes toward the flipped learning experience, instructor-provided video, and SCU e-learning platform. Reliability estimates (Cronbach's alpha) were calculated for all continuous variables and are reported in the Results section. A copy of this instrument can be observed in Appendix A.

Data analysis

All statistics analyses of the questionnaire about the impact of flipped classroom approach were conducted using the Statistical Package for Social Sciences (SPSS) version 18 and Mplus version 7. The interviews were audio recorded and transcribed. The main purpose of this study is to explore the influence and students' perspective of applying the flipped classroom approach to teaching English language in the TOEIC preparation course, and to understand the satisfaction of college students using the flipped classroom model with e-learning platform to carry out the English language learning.

The validity of the questionnaire was verified by the expert validity, including two EFL teachers, two experts who applied technology into the action learning and the college teachers who use of multimedia into the teaching, and revised according to their recommendations. After the item analysis and factor analysis of the questionnaire, the Cronbach's alpha reliability coefficients were .929, .894 and .870, respectively.

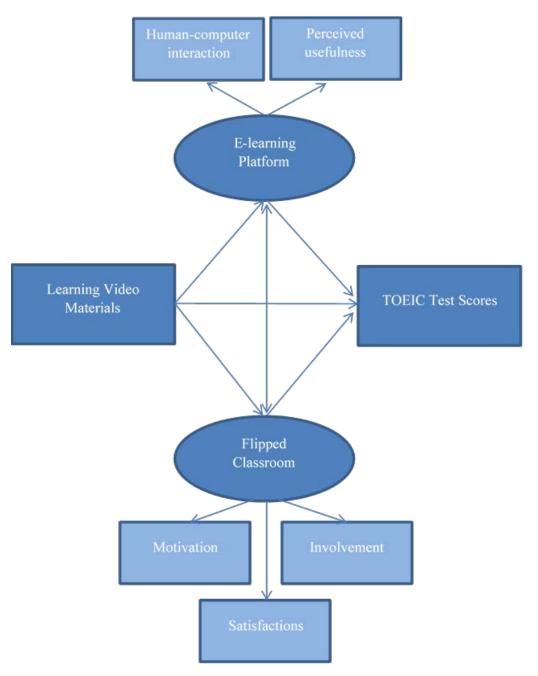


Figure 1. The structure equation model of this study

Furthermore, the impacts of flipped classroom approach with learning video material and e-learning platform on learning performances was explored by using structure equation modeling (SEM).

Table 1. Descriptive Statistics of Participants

		N	%
Gender	Male	8	24.2
	Female	25	75.8
The class performance ranking last semester	Top 5%	4	12.1
	Top 5% -10%	5	15.2
	Middle	18	54.5
	Last 5% -10%	5	15.2
	Last 5%	1	3.0
The experience of taking official TOEIC	Yes	8	24.2
	No	25	75.8
The experience of taking flipped classroom	First time	25	75.8
	Two or three times	4	12.1
	Four or five times	0	0.0
	More than six times	4	12.1
The average time spent on preparing TOEIC	Less than 1 hour	1	3.0
test per week	1-3hours	13	39.4
	4-6 hours	14	42.4
	7-9 hours	4	12.1
	Above 10 hours	1	3.0

RESULTS AND DISCUSSION

This paper shares findings from a survey study about students' values regarding the pre-class learning experiences in a TOEIC preparation course that utilized a flipped classroom approach. Findings demonstrate that students had positive attitudes towards using pre-class learning videos in the flipped classroom.

There are 33 undergraduate junior students participating in the flipped TOEIC preparation course with 75.8 % female, middle class performance ranking last semester (54.5%), and most of them have no experience in taking official TOEIC (75.8%) and also flipped classroom (75.8%). Only one student has been taken official TOEIC test and also has flipped classroom experience. The average time they spent on preparing TOEIC is from four hours to six hours per week (42.4%). The average score of pre-test is 524 and the average score of post-test is 617, the average progress score is 93.

The mean and standard deviation of each variable are reported in **Table 2**. It shows that there is no distinction on gender, the experience of flipped classroom, and the preparation time. The students who had been taken TOEIC show more motivation on flipped classroom learning, get more involvement in flipped classroom approach, and have higher satisfaction on the flipped classroom model. The students with higher academic achievement were also show significantly higher motivation on flipped classroom learning than those students with poor academic performance.

The results also reveal the correlations between variables, and indicated by the significant correlations between the video materials and the e-learning platform, between the video materials and the satisfaction of flipped classroom model, between the e-learning platform and the satisfaction of flipped classroom model, and among of motivation, involvement and satisfaction of flipped classroom model. Therefore, the flipped classroom approach is highly positive in the study. The one of most important results is the instructor-provided video materials and SCU e-learning platform do have a positive effect on the satisfaction of flipped classroom model. The satisfaction towards the flipped classroom model is helpful to motive and involve in their learning.

Through the statistical techniques of structure equation modeling (SEM), the impacts of flipped classroom approach with flipped classroom model.

Table 2. The mean and standard deviation of each variable

	N	Mean		SD
Learning video materials	33	3.59		0.38
Human-computer interaction	33	3.38		0.42
Perceived usefulness	33	3.51		0.42
Flipped classroom, Motivation	33	3.27	АВ	0.52
Flipped classroom, Involvement	33	3.38	Α	0.48
Flipped classroom, Satisfaction	33	3.61	Α	0.38
Test Scores before Class	33	203.44		125.93
Test Scores after Class	33	308.75		120.01
Test Scores after-before Class	33	105.31		51.63

A: The scores of students who had been taken TOEIC were significantly higher than those who had never taken TOEIC

Table 3. The correlations between variables

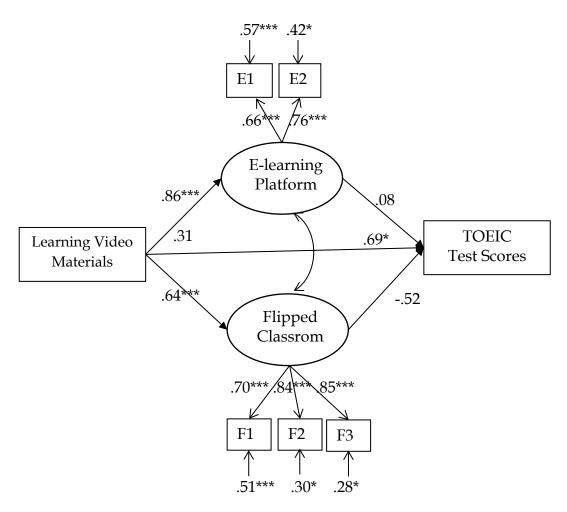
	1.	2.	3.	4.	5.	6.	7.	8.
1.Learning video materials								
2.Human-computer interaction	.57 ***							
3.Perceived usefulness of platform	.65 ***	.50 **						
4.Flipped classroom, Motivation	.36 *	.38 *	.23					
5.Flipped classroom, Involvement	.53 **	.49 **	.55 **	.63 ***				
6.Flipped classroom, Satisfaction	.58 ***	.41 *	.62 ***	.59 ***	.69 ***			
7.Test Scores before Class	.13	.06	.09	.19	.20	.02		
8.Test Scores after Class	.15	.03	.08	.06	.15	06	.91 ***	
9.Test Scores after-before Class	.05	08	04	31	15	20	32	.10

^{***} p < .001, ** p <.01, * p <.05

B: The scores of students with higher academic achievement were significantly higher than those with poor academic performance

The one semester TOEIC preparation courses can be frustrating for both student and teacher owing to insufficient time for test strategies teaching and practice. Besides, the students enter the course at a variety of English proficiency levels, the traditional class experience is frequently either boredom with a class that moves too slowly or frustration with one that moves too quickly. The students now are free to utilize as many or as few as they felt was appropriate, giving them ownership of their learning experience and the opportunity to tailor the course to their personal needs in the flipped TOEIC preparation course. The phenomenon and consequent are addressed mostly from students' interview. The independent learning that showing students' self-efficacy is the most precious value that found from the interview. Flipped classroom model is a learner-centered learning environment rather than teacher-centered one. In the learner-centered classroom, learners approach learning by sharing responsibility in terms of their learning. They become more engaged in the learning process compared with the teacher-centered classrooms (Sam, 2016).

This change serves to place the responsibility for fashioning the learning experience on the student, rather than the teacher. Motivated students in the redesigned course take a variety of paths to achieve their learning goals. The flipped TOEIC preparation course enables motivated students to invest additional time that they would not have had in a traditional course, using course materials that include podcasts, quizzes, practice problems, and slides as many times as they wish.



$$\chi^2$$
= 11.47, df = 10, ns , $RMSEA$ = .068, CFI =.982, TLI =.963, $SRMR$ =.052 *** $p < .001$, ** $p < .01$, * $p < .05$

Figure 2. Result of structure equation modeling

CONCLUSION

As a result of the educational reform for curriculum and teaching model, making learning assessment focus from the past of learning content to the promotion of students' learning procedure. The educational ultimate goal is to train the student to become a self-improvement, self-reflection and independent learner (Earl, 2002).

Based on previous studies concluded that the flipped classroom has promoted students' empowerment, development, and ability to learn independently or at their own pace (McLaughlin et al., 2013; Galway et al., 2014; Zainuddin & Halili, 2016). Not only reach the achievement or effective learning, the students' motivation also played a significant role in implementing the flipped classroom. The direct behavior and psychological characteristics is the most important factor that affects the efficiency of learning. Aşıksoy & Özdamlı (2016) also suggested that different learning strategies such as problem based learning and cooperative learning may be benefic to increase the efficiency of the approach. Moreover, the flipped classroom approach also provided more opportunities for in-class active learning and practice tutoring.

In this study, the flipped classroom model was involved instructor-provided videos and various on-line learning resources. In the new instructional model of flipped classroom, it further provided a more effective connection between traditional flipped in-class and out-of-class activities via other on-line learning activities from school's eLearning platform, such as the online tutoring for extra practice questions. Technology in education is an ever-evolving process and both the students and instructor are always demands update the emerging technology. The use of online materials such as podcasts, video and other content that students can access outside the classroom help them in better learning. The learners can study at different locations and times through collaborative distance learning by using various technological devices. Technology played an important role in improving students' active learning in this course. From Zainuddin and Halili's study (2016), the flipped classroom has been highlighted as an emerging technology for higher education which is very important to use at college level. However, it is important for educators to keep in mind that the flipped classroom is fundamentally a strategy that empowers students to self-learning outside the class and demonstrate an understanding of subject matter concepts in various ways during the class.

Like any other meaningful change, the redesign course required extensive work on the part of the teacher. The creation of online tools such as podcasts and quizzes is time-consuming and may appear overwhelming; these resources, however, should be viewed as an investment, with the initial outlay paying dividends for many future generations of students. Therefore, it seems reasonable to suggest that EFL/ESL teachers collaborate to help one another implement improved teaching techniques and methods, rather than flying solo.

This paper reports the initial findings from the students' questionnaire and interview about their experiences, attitudes, and perceptions regarding a TOEIC preparation courses using flipped classroom instructional strategy. Overall, the pre-class instructor-provided video materials and the on-line learning resource from the e-learning platform are useful and helpful for the implementation of the flipped classroom approach in this study. The modality with the flipped classroom model for teaching English language in a test preparation course was successful in improving students' learning motivation and self-efficacy of learning. Students are introduced to the content of test-taking strategies outside of the classroom, which enables them to come to the class prepared and participate in the activities for test mastering. Teacher and students could have more time to interact and clarify the text, more time to discuss ideas deeply, and more time for additional inputs on the materials used for learning and practice with active learning methodologies.

However, this study identified some challenges associated with the flipped classroom approach. The following are the recommendations based on the study:

First, although the preliminary evidence above is supportive, more explicit evidence for the effectiveness of flipped classrooms is still required. Second, the redesign flipped classroom approach required extensive work on the part of the teacher. The preparation work is time-consuming. EFL/ESL teachers collaborate to help one another implement improved teaching techniques and methods is suggested. The last but not the least, the flipped classroom's success relies upon students who can undertake substantial out-of-class work and would being motived to involve their time to be an independent learner.

REFERENCES

- Ahmad, S. Z. (2016). The Flipped Classroom Model to Develop Egyptian EFL Students' Listening Comprehension. *English Language Teaching*, 9(9), 166-178. doi:10.5539/elt.v9n9p166
- Al-Harbi, S. S., & Alshumaimeri, Y. A. (2016). The flipped classroom impact in grammar class on EFL Saudi secondary school students' performances and attitudes. *English Language Teaching*, 9(10), 60. doi:10.5539/elt.v9n10p60
- AlJaser, A. M. (2017). Effectiveness of Using Flipped Classroom Strategy in Academic Achievement and Self-Efficacy among Education Students of Princess Nourah bint Abdulrahman University. *English Language Teaching*, 10(4), 67. doi:10.5539/elt.v10n4p67
- Alsowat, H. (2016). An EFL Flipped Classroom Teaching Model: Effects on English Language Higher-Order Thinking Skills, Student Engagement and Satisfaction. *Journal of Education and Practice*, 7(9), 108-121.

- ARNÓ-MACIÀ, E. (2012). The role of technology in teaching languages for specific purposes courses. *The Modern Language Journal*, 96(s1), 89-104. doi:10.1111/j.1540-4781.2012.01299.x
- Aşıksoy, G., & Özdamlı, F. (2016). Flipped Classroom adapted to the ARCS Model of Motivation and applied to a Physics Course. Eurasia Journal of Mathematics, Science & Technology Education, 12(6). doi:10.12973/eurasia.2016.1251a
- Bauer Ramazani, C., Graney, J. M., Marshall, H. W., & Sabieh, C. (2016). Flipped learning in TESOL: Definitions, approaches, and implementation. *Tesol Journal*, 7(2), 429-437. doi:10.1002/tesj.250
- Bergmann, J., & Sams, A. (2012). Flip your classroom: Reach every student in every class every day: International Society for Technology in Education.
- Bhagat, K. K., Chang, C.-N., & Chang, C.-Y. (2016). The Impact of the Flipped Classroom on Mathematics Concept Learning in High School. *Educational Technology & Society*, 19(3), 134-142.
- Chen Hsieh, J. S., Wu, W. C. V., & Marek, M. W. (2017). Using the flipped classroom to enhance EFL learning. Computer Assisted Language Learning, 30(1-2), 1-21. doi:10.1080/09588221.2015.1111910
- Choe, E., & Seong, M. H. (2016). A Case Study of the Flipped Classroom in a Korean University General English Course. *Journal of Pan-Pacific Association of Applied Linguistics*, 20(2), 71-93.
- Doman, E., & Webb, M. (2017). The Flipped Experience for Chinese University Students Studying English as a Foreign Language. *TESOL Journal*, 8(1), 102-141. doi:10.1002/tesj.264
- Huang, Y. N., & Hong, Z. R. (2016). The effects of a flipped English classroom intervention on students' information and communication technology and English reading comprehension. *Educational Technology, Research and Development*, 64(2), 175. doi:10.1007/s11423-015-9412-7
- Karaaslan, H. (2016). Corpus use in enhancing lexico-grammatical awareness through flipped applications. *Journal of Language and Linguistic Studies*, 12(2), 152-165.
- Kostaris, C., Sergis, S., Sampson, D. G., Giannakos, M. Í., & Pelliccione, L. (2017). Investigating the potential of the flipped classroom model in K-12 ICT teaching and learning: An action research study. *Journal of Educational Technology & Society*, 20(1), 261.
- Lee, C., Yeung, A. S., & Ip, T. (2016). Use of computer technology for English language learning: do learning styles, gender, and age matter? *Computer Assisted Language Learning*, 29(5), 1033-1049. doi:10.1080/09588221.2016.1140655
- Long, T., Logan, J., & Waugh, M. (2016). Students' perceptions of the value of using videos as a pre-class learning experience in the flipped classroom. *TechTrends*, 60(3), 245-252. DOI 10.1007/s11528-016-0045-4
- Mehring, J. (2016). Present research on the flipped classroom and potential tools for the efl classroom. *Computers in the Schools*, 33(1), 1-10. DOI:10.1080/07380569.2016.1139912
- Muhametjanova, G., & Cagiltay, K. (2016). Integrating Technology into Instruction at a Public University In Kyrgyzstan: Barriers And Enablers. *Eurasia Journal of Mathematics, Science & Technology Education*, 12(10).
- Nederveld, A., & Berge, Z. L. (2015). Flipped learning in the workplace. *Journal of Workplace Learning*, 27(2), 162-172. doi:10.1108/JWL-06-2014-0044
- Papadima-Sophocleous, S., Bradley, L., & Thouësny, S. (Eds.). (2016). *CALL communities and culture–short papers from EUROCALL* 2016. Research-publishing. net.
- Sam, D. P. (2016). Natural Approach of Teaching English Language on a Flipped Classroom Platform to Tertiary Level Engineering Learners.
- Shaffer, S. (2016). One High School English Teacher. *Journal of Adolescent & Adult Literacy*, 59(5), 563-573. doi:10.1002/jaal.473
- Stickler, U., & Shi, L. (2016). TELL us about CALL: An introduction to the Virtual Special Issue (VSI) on the development of technology enhanced and computer assisted language learning published in the System Journal. *System*, 56, 119-126. doi:10.1016/j.system.2015.12.004
- Venkatesh, V., & Davis, F. D. (1996). A model of the antecedents of perceived ease of use: Development and test. *Decision sciences*, 27(3), 451-481. doi:10.1111/j.1540-5915.1996.tb00860.x
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language teaching*, 31(02), 57-71.

- Webb, M., & Doman, E. (2016). Does the Flipped Classroom Lead to Increased Gains on Learning Outcomes in ESL/EFL Contexts? *CATESOL Journal*, 28(1), 39-67.
- Xu, L. (2012). The application of learner autonomy theory and model into ESP technology-assisted curriculum construction. *International Journal of English Linguistics*, 2(5), 94. doi:10.5539/ijel.v2n5p94
- Yang, C. C. R. (2017). An Investigation of the Use of the 'Flipped Classroom' Pedagogy in Secondary English Language Classrooms. *Journal of Information Technology Education: Innovations in Practice*, 16, 1-20.
- Zainuddin, Z. (2017). First-Year College Students' Experiences in the EFL Flipped Classroom: A Case Study in Indonesia. *International Journal of Instruction*, 10(1), 133-150.
- Zainuddin, Z., & Halili, S. H. (2016). Flipped classroom research and trends from different fields of study. *The International Review of Research in Open and Distributed Learning*, 17(3). doi:10.19173/irrodl.v17i3.2274

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