

Incorporation of Flipped Learning into EFL Classrooms Performance and Perception

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Abstract

Innovative mobile-based tools have made new opportunities for learners to spend more quality time inside the classrooms. Keeping this in mind, the present study sought to examine the effect of the flipped classroom on developing EFL learners' speaking and listening skills. To do so, 60 EFL students from two universities in Iran were assigned into one of the classes of flipped and conventional groups. Telegram app was used as the online platform for the flipped group's participants through which the listening materials, including Ted-talk videos and students' book's videos were posted prior to the class, and the speaking activities were done via open discussion forums in the Telegram group. To elicit the required data, multiple sources of data collection, including an Oxford Placement Test (OPT), a listening test, a speaking test, a perception questionnaire, and a written self-report survey were used. Both quantitative and qualitative analyses were used to analyze the data. The findings revealed that the flipped group's participants significantly outperformed those in the conventional group in the post-test. The results of the questionnaire also indicated that most participants of the flipped group were satisfied with learning English in the flipped classroom, and found this modern technology improving their listening and speaking skills. Furthermore, they found Telegram a suitable platform for learning language.

Keywords: EFL Learners, Flipped Classroom, Perception, Listening, Speaking, Telegram App

1. Introduction

When the primary effort of the teacher is focused on their students' needs, successful teaching happens, and when students' class performance enhances due to the significant learning they have experienced, success can occur (Fink, 2013). Fortunately, by the growth and incorporation of technology into education, this kind of learning experience has been made possible. By the emergence of blended learning, conventional instruction has been combined with online tasks and activities, and provided a collaborative, student-centered learning environment (Graham, 2006). Nevertheless, such necessity has not been appropriately addresses incurrent instruction, since conventional instruction still dominates and requires learners to learn with the same structure via similar interface (Wauters, Desmet, & Noortgate, 2010). Hence, innovative educators have been seeking novel instructional pedagogies to promote language learning outcome (Johnson, Adams Becker, Estrada, & Freeman, 2014).

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Teachers of 21st century are somehow required to know technology and how to teach the content using technology. Teachers ought to be aware of the capabilities and limits of tools in order to match technology with their instructional goals and the content that they are teaching (Yang & Chen, 2007). Another major issue of educators is related to how students can become more engaged before, during and after the class period. Different factors affect students' engagement in the learning process including teacher support, quality of instruction, peer connections, and classroom structure and management (Clark, 2013). By taking advantage of integrated technology by using it as a tool, the flipped classroom presents information prior to the classroom and as a result makes students more engaged with the course contents before attending the class.

Although there have been quite few studies on the success of flipped classrooms in Iranian tertiary education (Abaeian & Samadi, 2016, Amiryousefi, 2017, Kafi & Motallebzadeh, 2014), most teachers have been loyal to the conventional methods of language teaching. Universities and language institutes are falling behind in helping language teachers to become prepared to implement flipped classrooms or even to decide if they want to apply the method. In fact, there is no official support for teachers to apply flipped classrooms as an effective method of instruction. Therefore, the current study is deemed significant to examine the impact of flipped instruction on the language performance of Iranian EFL learners, their participation level and their attitudes towards flipped learning. In order to achieve the objectives, the current study aims to answer the following questions:

Research Question One: Does the flipped model of instruction have any impacts on EFL learners' listening and speaking skills?

Research Question Two: Are flipped and conventional models of instruction significantly different in enhancing EFL learners' speaking and listening skills?

Research Question Three: How differently does the flipped classroom affect the speaking and listening development of EFL learners?

Research Question Four: What are the students' perceptions toward flipped learning experience?

2. Literature Review

The present study sought to explore the language learning among Iranian EFL learners in a mobile-based flipped learning in an EFL context. The review of literature centers on flipped classroom in general and relevant studies on flipped classroom in EFL setting in particular.

2.1. Flipped Classrooms

In the last few years, there has been a dramatic increase in the use of a new educational paradigm called flipped learning. The focus of class time is changed in the flipped classroom by turning attention to the learner and learning, thereby leads to more class time devoted to communication (Bergmann & Sams, 2012). It is called flipped learning since the whole classroom is flipped. In its simplest form, teaching is done at home through teacher-made videos prior to the class and homework is now done inside the classroom (Witten, 2013).

The main purpose of technology in flipped classrooms in EFL classes is allocating more class time to meaningful exchanges in L2. This extra time might allow students to raise their degrees of agency and the ability to reach deeper levels of cognitive work (Moranski & Kim, 2016). Based on the cognitive load theory introduced by Sweller, (1988), flipped learning can work well in language classes if the students are provided with the opportunities to do the lower level of cognitive load (receiving information and comprehending them) prior to the class and focus on higher levels of cognitive load (application, analysis, synthesis, or evaluation) inside the class through hands-on activities. In order to facilitate the implementation of flipped classrooms, the Flipped Learning Network (FLN) developed four pillars of flipped learning that are representative of essential activities in this model of instruction. The Four Pillars of F-L-I-P™ include flexible environment, learning culture, intentional content, and professional educator (Chen Hsieh, Wu, & Marek, 2017).

Flexible Environment: Regarding the flexible environment, flipped learning provides various learning activities; teachers usually readjust their classrooms in order to support either group work or individual practice. Consequently, students are allowed to choose when and where to view the videos and be more flexible in their own learning. As a result, learning goals are achieved in greater depths and more opportunities are provided for learning (Hamden et al., 2013). Accordingly, this study provided the learners with both an online learning community and physical classroom instruction.

Learning Culture: Learning culture advocates a learner-centered learning culture. In the traditional classrooms, the teacher was considered the “sage on the stage” (King, 1993). It means that the teacher was the main source of information. By contrast, the flipped classroom intentionally readjusts the instruction from a teacher-centered approach to a learner-centered approach. Consequently, students are actively engaged in the construction of knowledge as they are engaged in their own learning and evaluate their learning dynamically and meaningfully which in turn has its own personal satisfaction (Ouda & Ahmed, 2016).

Intentional Content: As the third pillar of the flipped classroom, intentional content accounts for the decisions that need to be taken by the teacher in a flipped classroom (Hamden et al., 2013). This pillar aims to increase classroom time to pave the way for "student-centered, active learning strategies, depending on grade level and subject matter" (Hamden et al., 2013, p. 6). The instructional design applied in the current study was a learner-centered approach, where students were actively engaged with course contents outside the classroom collaboratively via an online learning group. The teacher-made videos about English refusals included intentional materials particularly made for the students to learn the type of refusal under study.

Professional Educator: The teacher's role seems to be more demanding and important in a flipped classroom than the one in the traditional classes. Teachers constantly observe their students, evaluate their work and give them relevant feedback if necessary (FLN, 2014). This pillar stresses the importance of teachers in flipped classrooms although their role is less visible (Hamden et al., 2013). The current researcher constantly observed the participants' progress through study logs and provided them with online and personal feedback. The Four Educational Pillars of Flipped Learning taken from the FLN is illustrated in figure 1 below.

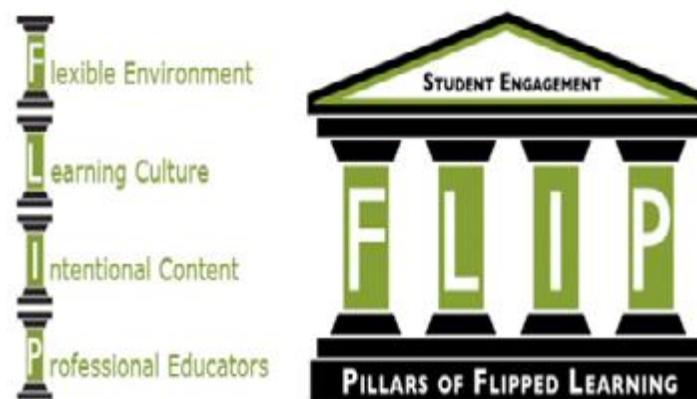


Figure 1: The Four Pillars of Flipped Learning

2.2. Previous Research on Flipped Learning in EFL Contexts

Generally, both quantitative and qualitative approaches are utilized to make a comparison between the flipped learning and the conventional ones or examine the perception of the learners towards flipped classroom. Basal (2012) implemented the flipped classroom among EFL learners of Yildiz Technical University in the “Advanced Reading and Writing I” course. He concluded that the perceptions of the majority of the participants towards using a flipped learning model were positive.

The author used students' excerpts of reflections to support his conclusion. Nicolosi (2012) flipped a grammar class through flipped classroom techniques. The researcher argued that the misunderstandings of flipped classroom by explaining that flipped classrooms are not all about watching videos at home and doing homework in class, but it involves a significant change both in the type of instruction and in the students' process of learning. She showed that the flipped method gave her a chance to become more aware of students' metacognitive abilities. She also argued that the flipped classroom supported the students anytime anywhere.

In another study, Webb, Doman, and Pusey's (2014) study involved 150 EFL students attending a university in China. Questionnaires administered to students revealed that even though a few of the participants still preferred traditional teacher-fronted instruction, most of the students in the flipped group became accustomed to it over time and seemed to be more comfortable with this new approach. Student interviews also revealed that students found the teacher to be more of a friend in the flipped paradigm, someone they could connect with both online and in class at any time, any day of the week. Furthermore, teacher participants reported that the flipped classroom should be recommended as an effective means for increasing novelty and opportunities for higher-order learning in the classroom. In a similar vein, Touchstone (2015) divided the students into two groups of flipped classroom students and traditional classroom students. The group representing the flipped classroom approach listened to or watched lecture material at home and then worked on their assignments during class time. The group having a traditional approach undertook textbook reading at home prior to attending classroom lectures. Students in the flipped classroom reported that they learned more and enjoyed the course more than those in a traditional classroom.

Hung (2015) implemented the flipped classroom with 75 EFL learners taking a communicative English course in a Taiwanese university. The findings showed that the students who had received flipped lessons in the form of WebQuest sessions statistically had a significant improvement in academic performance. Possible reasons might lie in the instructional videos and other forms of pre-class contents organized and distributed by WebQuest, which provided the students with the necessary competencies to prepare for in-class activities. In another study, Lee and Wallace (2017) attempted to examine whether flipped classroom enhanced the English learning of South Korean EFL learners. Of the 79 participants, 39 learned English through communicative language teaching approach, while 40 studied English in a flipped classroom. Data were collected from the participants' achievements in three major tasks, their responses to three surveys, and the teacher's notes on the students' level of participation in the process of their English learning. The results showed that the flipped classroom's participants had higher average scores in their final three tasks than their counterparts in the communicative class. Furthermore, the researchers found that students in the flipped classroom were more engaged in the learning process than those in the conventional classroom.

Regarding the perception, the flipped classroom's students seemed to enjoy learning English in a flipped classroom environment. More recently, Chen Hsieh et al., (2017) examined the effect of the flipped classroom model on idiom use of EFL learners. The participants in the flipped group learned idioms posted by the instructor through LINE app, and the procedure for the control group was based on regular instruction. The data were collected through pre-tests and post-tests of idioms, two questionnaires to investigate the attitude of the participants toward flipped learning experience and LINE, the platform selected for the study and the interviews. The findings revealed that the flipped classroom using online written and oral communication not only raised the participant's motivation, but also enhanced their idiomatic knowledge, suggesting that the flipped classroom succeeded in accomplishing the instructional aims of the course.

The results of all these studies seem to suggest that flipped learning can make students be more active, involved, and motivated and gain better learning outcomes. According to Chen Hsieh et al. (2017), "the key to the success of the flipped instruction is whether the students do the preparation work outside the class. If they do not, the teacher cannot engage them at an advanced level inside the class" (p. 17). Furthermore, McLaughlin, White, Khanova, & Yuriev (2016) stated

that the feedback students receive from their performance during the in-class phase of flipped learning can cause them to reflect about their learning experience and evaluate it as successful or unsuccessful. Nevertheless, there have been some studies that have suggested no significant differences between the flipped and non-flipped models in terms of academic outcome (Adnan, 2017; Guidry, Cubillos, & Pusecker, 2013; Kissau, McCullough & Pyke, 2010). However, these studies, at the very least, demonstrated that flipped classrooms are equally as effective as conventional models of instruction and should be considered equally in pedagogical decisions.

3. Methods

3.1. Participants

The participants were 60 freshmen English students from two universities in Iran. There were 38 females and 12 males between the ages of 18 and 27. They had already studied English for at least 5 years through high school, and English institutes. The participants had taken a required course called Conversation 1 aiming at improving the EFL students' English listening and speaking skills. *Speak Now 2*, a pre-intermediate level book, was taught in both flipped and conventional groups. In order to homogenize the participants, they were given the Oxford Placement Test (OPT). Based on their scores on the OPT, 60 participants who were at pre-intermediate level were selected to take part in the study (i.e. 30 in the flipped and 30 in the conventional group) and the rest who had either lower or higher levels were discarded.

3.2. Instruments

Overall, four types of instruments were used to collect the data in this study: an OPT; a listening and speaking test, a perception questionnaire, and a written self-report survey.

Oxford Placement Test (OPT): Oxford Placement Test 1 (Allen, 2004) is a standardized and validated proficiency test published by Oxford University Press. It consists of 100 listening and 100 grammar items. It took about 90 minutes for the participants to take the test. The internal consistency of the test was measured and found to be acceptable as indicated by Cronbach's alpha coefficient of .83.

Listening and Speaking Test: The test was extracted from *Speak Now 2* teacher's book. The listening test contained 20 multiple-choice listening questions. The scoring procedure was one for each correct response and zero for each incorrect one. The speaking test comprised 10 interviewed questions (see Appendix A). Two experienced raters were employed to compare the groups as for their speaking ability. In terms of scoring, a rating scale was developed based on the reference levels described and presented in Common European Framework of Reference for Languages (CEFR) for assessing spoken language use. It assessed the speaking based on accuracy; fluency, interaction, and coherence on a rating scale ranging from 0 to 40 (see Appendix B). The test obtained an alpha coefficient of .84 for the current study.

Perception questionnaire: To elicit the flipped group participants' perception towards the treatment they had received, a teacher-made perception questionnaire was employed. It contained 18 questions in four categories of 1) overall learning experience (seven questions); 2) effects on speaking (four items); 3) effects on listening (three items) and learning through Telegram app (four questions). The participants were asked to rate the items based on a 5-point Likert scale. Two experts in the EFL field reviewed the questionnaire to improve its face validity. The reliability of the questionnaire was measured and suggested an acceptable Cronbach's alpha coefficient of .81.

Written Self-report Survey: A written self-report survey (see Appendix C) was used to elicit the participants' perceptions towards the flipped learning in more details. It included four open-ended questions.

3.3. Procedure

Sixty freshmen English students from two intact classes in two state universities in Iran participated in the study. They had enrolled in a 44-hour course called Conversation 1. During the orientation session for the flipped group, the teacher created a group in Telegram app and instructed them how to watch and listen to the materials posted in the group and how to participate in the group discussion. As for listening activities, TED-talk videos and relevant book topics' videos were sent to the group three days before each class. In regard to speaking activities, a topic was chosen every day and pinned to be discussed. As for inside- class activities, the students were asked to report on the videos they had already watched and present their personal ideas and experiences. This stage was performed in two ways of whole class and group discussions where the students were divided into groups and discussed their ideas with their group members.

As for the instruction in the conventional group, the class was taught through the use of mainstream approach of communicative language teaching (CLT). There were audios and videos played for the participants inside the class without any prior class preparation. In a 90-minute class time, more than 50 percent of the class time was spent on watching videos and the teacher's instruction and the rest on group-work and whole class activities.

4. Results

The first goal of this research was to examine if flipped learning has any significant effect on Iranian EFL learners' language performance using the end of the term assessment. Table 1 provides the flipped and conventional groups' descriptive statistics to represent the quality of participants' language performance in the current study.

Table 1: Descriptive Statistics of the Flipped and the Conventional Groups

Tests	Instruction	N	Mean	SD	Std. Error Mean
Pre-test	Flipped	30	28.80	5.06	.72
	Conventional	30	27.70	4.90	.88
Post-test	Flipped	30	44.83	5.73	.88
	Conventional	30	42.10	4.55	.995

Descriptive statistics comparing the pre- and the post-tests in the flipped and conventional groups revealed that in both types of instruction, the mean score of the post-test was higher than that of the pre-test. In addition, the paired-samples t-test demonstrated in Table 2 indicated that in both types of instruction, the participants' results were statistically more significant on the post-test ($p < .05$) in comparison with the pre-test.

Table 2: Paired Samples t-test of the Evaluation of Flipped/Conventional Groups

	Paired Differences							
	95% Confidence Interval of the Difference							
	Mean	Std.	Std. Error Mean	Lower	Upper	T	DF	Sig. (2-tailed)
post-test – pre-test	16.33	5.49	1.002	13.720	16.1280	23.820	29	.000
post-test – pre-test	15.60	5.24	.958	16.36	-12.431	15.02	29	.000

In order to answer the second research question whether there is a statistically significant difference between the mean scores of the flipped and conventional groups in post-tests, an *independent samples t-test* was run. The results, as indicated in Table 3, suggested that the post-test's scores of the flipped group were significantly higher than those of the conventional group ($p < .05$). The

findings revealed that both types of instruction enhanced the participants' speaking and listening abilities; however, the flipped classroom contributed to better learning outcomes.

Table 3: Independent Samples t-test of Post-tests of Flipped/Conventional Groups

Groups	N	M	STD	t-test for equality of means		
				T	DF	Sig.
Flipped	30	44.83	4.55	2.04	58	.045
Conventional	30	42.10	5.73			

In terms of the third research question whether flipped classroom affects speaking and listening differently, the result of the flipped group's participants in speaking and listening were compared. Table 4 shows the descriptive statistics to compare the mean scores in speaking and listening tests. Descriptive statistics comparing the listening and speaking tests revealed that the students had a better performance in listening test than that of speaking test suggesting that the flipped classroom techniques had a better effect in developing the listening comprehension of the participants.

Table 4: Descriptive Statistics of the Speaking and Listening Tests

Tests	Instruction	N	Mean	SD	Std. Error Mean
Listening	Flipped	30	16.83	2.26	.413
Speaking	Flipped	30	14.43	2.71	.493

In order to examine whether this difference was statistically significant, a paired t-test was carried out to measure whether this difference was statistically significant. Table 5 indicated that the participants' results were statistically more significant in listening test ($p < .05$) in comparison with the speaking test.

Table 5: Paired Samples T-Test of the Evaluation of Speaking and Listening Tests

	Paired Differences							
	95% Confidence Interval of the Difference							
	Mean	Std.	Std.Error Mean	Lower	Upper	T	DF	Sig. (2-tailed)
listening – speaking	2.833	3.384	.617	1.569	4.097	4.585	29	.000

Consequently, these results suggested that, in general terms, while the flipped learning procedure significantly developed the participants' listening and speaking skills in the flipped group, this innovative model had a better effect in the listening comprehension of the learners.

Results of the Questionnaire

In respect to the fourth research question, the perception of students towards flipped learning experience, a researcher-made questionnaire was employed to evaluate the participants' perception of learning in a flipped classroom. The statements of the questionnaire represented learning experience, effect of speaking and effect of listening and learning through Telegram.

Table 6: Results of Questionnaire

N	Statements	N	X	SD
Learning Experience				
1	Learning English via flipped classroom, I can study at my own pace due to availability and accessibility of all necessary online resources	30	3.92	0.631
2	I found that at times following the class procedures gave me a feeling of deep personal satisfaction.	30	3.83	0.509
3	Learning English via flipped classroom encourages me to work with my classmates outside of class	30	4.273	0.522
4	The flipped classroom procedures helped me to be more willing to communicate in English.	30	3.87	0.547
5	The class procedures helped me to be more active inside the class.	30	4.21	0.542
6	Learning English via FC, I can distribute knowledge to classmates more quickly and effectively.	30	3.65	0.548
7	I look forward to have more English courses of this kind.	30	4.12	0.681
Effects on Speaking				
8	The class procedures helped me speak more fluently.	30	4.09	0.435
9	The class procedures helped me speak more accurately	30	3.97	0.546
10	The class procedures helped me improve my pronunciation.	30	3.58	0.621
11	The class procedures improved my speaking skill.	30	4.03	0.345
Effect on listening				
12	The class procedures helped me better understand English reports and videos.	30	4.13	0.453
13	The class procedures helped me do better on listening tests.	30	4.28	0.296
14	The class procedures improved my listening skill.	30	4.11	0.298
Learning through Telegram app				
15	I think I felt more comfortable in using Telegram to comment on the points given by my teacher or other members comparing to a face-to-face situation	30	4.55	0.211
16	I think the videos and other materials posted by our teacher and other members improved my speaking and listening skills	30	4.38	0.356
17	Interacting with my teacher and other members through Telegram was convenient	30	4.46	0.453
18	I will register in other online classes that use Telegram as a means of posting course materials and as a discussion board	30	4.12	0.479

The results illustrated in Table 7 indicate the positive perception of the participants with the flipped classroom, with the mean scores of 3.98, 3.91, 4.17 and 4.37 for learning experience, effects on speaking, effect on listening and learning through Telegram app respectively.

Table 7: Descriptive Statistics of the Perception of Flipped Classroom Experience

Construct	Mean	SD	Min	Max	Mode	N of items
Learning Experience	3.98	.31	1	5	4	7
Effects on Speaking	3.91	.30	2	5	4	4
Effect on Listening	4.17	.36	3	5	4	3
Learning through Telegram app	4.37	.31	3	5	5	4

Learning Experience: The result of Q1 to Q7 revealed that 87.5% of the students agreed or strongly agreed that it was a useful learning experience. The students considered the flipped classroom highly effective and helpful. As Table 8 illustrates, the mostly frequent response was "agree" (Mode=4).

Effects on Speaking: Based on the result of Q8 to Q11 of LEQ, 71% of the respondents approved that the flipped classroom had a gear impact on speaking of the EFL learners. However, the participants, 24.3% were neutral and 4.7 % disagreed with the statements in this category.

Effects on Listening: The third section was about how much the flipped classroom had an effect on the listening of the students. 91 % of the participants agreed or strongly agreed that the flipped classroom had engaged them with their learning through the videos, clips posted by the teacher and other students (Q12 to Q15).

Learning through Telegram app: The results (Q 14 to Q18) clearly revealed that the participants were satisfied with Telegram app as a platform for the delivery of content material. 92.86% agreed or strongly agreed that the experience was satisfactory. Interestingly enough, the mode of statistics is 5 according to Table 7 suggesting that most participants were strongly satisfied with learning through the Telegram app. To further analyze the participants' perceptions of the flipped classroom, the flipped group participant' responses to the open-ended questions were content analyzed. The content analysis of the responses resulted in four major categories of learning experience, problems, effectiveness and satisfaction. The analysis has been elaborated in more details below:

Flipped learning experience: Many of the participants were of the opinion that the flipped learning techniques used in this research were effective ways to improve their speaking and listening skills. Some of the students' responses are reported below:

FS 09: *"In my opinion, it was a very good experience for me. I was able to review the videos again and again because I could stop them any time I liked."*

FS 18: *"I felt less nervous because I did my homework with my classmate in class. Telegram made learning more enjoyable for me."*

FS 19: *"I believe our normal classes are boring. With Telegram I became more active."*

Demerits: Regarding the second question, the problems with the flipped classroom, a few of the students believed that flipped procedures required a large amount of time comparing with the conventional classes and it is sometimes hard to catch up on. Some of the opinions are mentioned below:

FS 12: *"My only problem was that it took me lots of time and I had too much to do"*.

FS 16: *"The only problem I had was the Internet problem. I had problem sometimes to open the clips."*

Suggestions: In regard to the third question whether flipped classroom could be improved, the participants mostly answered that they did not have any special problem and only few of whom proposed that the teacher could direct and support the members to get them more engaged.

FS 13: *"I think our teacher could make the group more active through more interactive tasks and activities"*.

Satisfaction: As for to the last question regarding the most enjoyable part of the flipped classroom, many of the students mentioned the novelty, communicative tasks and design as the most important aspects of flipped classroom.

FS 1: *"The best part was talking with my friends in English most of the time"*

FS 21: *"The best part was watching the videos any time I liked"*

FS 10: *"I really enjoyed practicing before class to be ready to speak inside the class"*

FS 23: *"The best part was talking with my teacher and classmates anytime I liked without any stress"*.

5. Discussion

The first finding of this study was that flipped learning significantly developed the speaking and listening skills of the EFL learners. This result might be explained in terms of the pedagogical components of the flipped classroom. To start with, the participants in the flipped group were

provided with the instructional materials before the class, and the class began with communication and interaction among the students. Although both groups had the same course content, teacher and materials in Communication 1 course, the flipped group was taught via flipped classroom procedures. As mentioned in the literature review, flipped learning can be grounded theoretically in social constructivism, student-centered learning theories, active learning and learner autonomy. All these theories have a mutual perspective that learning is constructed through social environment and a facilitator. Owing to flipped classroom procedures, teacher and students have more time to share knowledge with each other. Cooperative learning, as another important aspect of social constructivism, occurs in flipped classrooms and class time, as it was seen in this study, include practice activities where students complete the tasks in pairs or groups.

In respect to the particular effects of this innovative technology on students' outcome, the current study yielded positive results on the participant' achievement and satisfaction with the course materials. The next strength of the current study was that it represented a structured effort to flip the course using social media, Telegram in this study. The results of this study revealed that the structure of learning materials posted through Telegram app had a positive effect on how the learners perceived the learning environment and participated in the learning process

The findings were in line with that of Hung (2015) who had examined the possible effects of the flipping the English class and concluded that the average scores of the post-test was higher than those of the pre-test. Our results were also paralleled to Ahmed (2016) who investigated the effects of a flipped classroom on writing and the students' attitude. He found that the flipped group's average score ($M = 20$) was higher than the non-flipped group's average score ($M = 9.47$). He concluded that the learner-centered nature of flipped classroom was the main reason for such improvement. Through the technology, the students could search many learning resources online, watch clips on YouTube, and do some quizzes on their Facebook pages.

Authentic listening tasks and activities used in this study had a very important role in the participants' listening development. It shows how high exposure to authentic materials especially outside of classroom where students have more time and less stress to play and replay the clips can improve their listening comprehension. Interestingly, it was ranked as the most effective part in the attitude questionnaire showing that flipped learning can have a substantial effect on listening development of EFL learners. Regarding the speaking, since there were a lot of cooperative activities inside the class, the students interacted together in order to accomplish a specific goal. As a result, they could improve their speaking by sharing their knowledge with others to find the ways to resolve their problems.

Another important reason for the improvement of the students' speaking might lie in what Wen (2008) called out-put driven/input-enabled model that "if language classes start with output, language learners are more motivated to learn the language and to use the language knowledge they receive" (Haghighi, Jafarigohar, Khoshsima & Vahdany, 2018). Our findings are also in line with Herreid and Schiller's (2013) results which suggested if teachers encourage students' self-study, they will be more engaged with the content and more active inside the classroom.

The finding of the open-ended survey supported the quantitative findings of this study. Most participants in the flipped group stated that they had spent much more time on learning tasks in this class than their conventional classes. It supports the result of Haghighi et al.'s (2018) study suggesting that well-blended flipped classrooms enhanced face to face interaction, maintained more interaction and achieved more learning goals. Moreover, the analysis of the open-ended survey suggested that students are more prepared and less nervous in the flipped classes because of previous preparation. However, the participants expressed some concern over the flipped classroom which needs to be taken into account, specifically by instructional designers. They complained about the workload and the large amount of time they had to exercise, and believed that they did much more work than their conventional classes. These points support what Chen Hsieh et al.'s (2017) argued that it is difficult to persuade students to work on their own pace and follow the

activities that the flipped learning requires. Therefore, based on the responses to the attitude questionnaire and open-ended questions in the survey, teachers have to be engaged in all parts of the flipped classroom to provide interesting tasks and activities, to give feedback, and to engage students more in communicative tasks and activities.

6. Conclusion

Overall, the results of this study have several pedagogical implications. To start with, the findings suggest that flipped model of instruction is an appropriate design to improve EFL learners' speaking and listening skills by engaging them in communicative activities. Next, English learners in EFL settings usually suffer from lack of interaction outside of classrooms but owing to flipped classroom's techniques, ample opportunities are provided for them to use the language more communicatively. Besides impressive outcome in speaking and listening after the treatment, the students also felt more comfortable, motivated, and satisfied in their language learning. In the end, it was revealed that Telegram app is an appropriate instructional tool for language learning. To conclude, the limitations of this study need to be acknowledged. First, as mentioned before, it was not possible to recruit participants from alternative teachers and this study was conducted on the researchers' own students. A replication of this study could be conducted with other participants to ensure that there was not any bias in the results. Next, the sample size was not big enough because of the nature of course registration. So, random sampling was not possible either, which makes generalization of the findings rather difficult. Hence, future study with a bigger sample size is required to confirm the positive impact of flipped classroom on listening and speaking of EFL learners.

References

- Abaeian, H., & Samadi, L. (2016). The effect of flipped classroom on Iranian EFL learners' L2 reading comprehension: Focusing on different proficiency levels. *Journal of Applied Linguistics and Language Research*, 3(6), 295–304.
- Adnan, M. (2017). Perceptions of senior-year ELT students for flipped classroom: A material development course. *Computer Assisted Language Learning*, 30 (3-4), 204–222.
- Ahmed, M. A. E. A. S. (2016). The effect of a flipping classroom on writing skill in English as a foreign language and students' attitude toward flipping. *US-China Foreign Language*, 14(2), 98-114.
- Amiryousefi, M. (2017). The incorporation of flipped learning into conventional classes to enhance EFL learners' L2 speaking, L2 listening, and engagement. *Innovation in Language Learning and Teaching*, 13(2), 147-161.
- Basal, A. (2015). The implementation of a flipped classroom in foreign language teaching. *Turkish Online Journal of Distance Education*, 16(4), 28–37.
- 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.
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. Washington, DC: Internal Society for Technology in Education.
- 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.
- Clark, C. (2013). *A phenomenological study of the impact of pre-service and in-service training regarding the integration of twenty-first century technologies into selected teachers' instruction*. (Unpublished Doctoral dissertation), Liberty University, Lynchburg, VA.
- Fink, L. D. (2013). *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco: Jossey-Bass.

- Graham, C. R. (2006). Blended learning systems. *The handbook of blended learning*. San Francisco, CA: Pfeiffer Publishing
- Guidry, K. R., Cubillos, J., & Pusecker, K. (2013). The connection between self-regulated learning and student success in a hybrid course. In *Association for Institutional Research Annual Forum, Long Beach, CA*. Retrieved from: http://www.mistakengoa.com/docs/Self_regulated_learning_hybrid_course.Pdf.
- Haghighi, H., Jafarigohar, M., Khoshsima, H., & Vahdany, F. (2018). Impact of Flipped Classroom on EFL learners' appropriate use of refusal: Achievement, participation, perception. *Computer Assisted Language Learning*, 32(3), 261-293.
- Hamden, N., McKnight, P.E., McKnight, K., & Arfstrom, K. (2013). *A review of flipped learning*. *Flipped Learning Network*. Upper Saddle River, NJ: Pearson Education.
- Herreid, C. F., & Schiller, N. A. (2013). Case studies and the flipped classroom. *Journal of College Science Teaching*, 42(5), 62–66.
- Hung, H. T. (2015). Flipping the classroom for English language learners to foster active learning. *Computer Assisted Language Learning*, 28(1), 81–96.
- Kafi, Z., & Motallebzadeh, K. (2014). A flipped classroom: Project-based instruction and 21st century skills. *International Journal of Language Learning and Applied Linguistics World*, 6(4), 35-46.
- Kissau, S., McCullough, H., & Pyke, J. G. (2010). Leveling the playing field: The effects of online second language instruction on student willingness to communicate in French. *Calico Journal*, 27(2), 277–297.
- Lee, G., & Wallace, A. (2017). Flipped learning in the English as a foreign language classroom: Outcomes and perceptions. *TESOL Quarterly*, 52(1), 62-84.
- McLaughlin, J. E., White, P. J., Khanova, J., & Yuriev, E. (2016). Flipped classroom implementation: A case report of two higher education institutions in the United States and Australia. *Computers in the Schools*, 33(1), 24–37.
- Moranski, K., & Kim, F. (2016). 'Flipping' lessons in a multi-section Spanish course: Implications for assigning explicit grammar instruction outside of the classroom. *The Modern Language Journal*, 100(4), 830-852.
- Nicolosi, A. (2012). *Grammar Lessons with the Flipped Classroom Method*. Paper from the 3rd Black Sea ELT Conference. 'Technology: a Bridge to Language Learning. Samsun: Turkey. November 15-17.
- Ouda, H., & Ahmed, K. (2016). Flipped learning as a new educational paradigm: An analytical critical study. *European Scientific Journal*, 12(10), 417-444.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285.
- Touchstone, M. (2015). Flipping the classroom and student performance in advanced statistics: Evidence from a quasi-experiment. *Journal of Political Science Education*, 11(1), 28-44.
- Wauters, K., Desmet, P., & Van Den Noortgate, W. (2010). Adaptive item-based learning environments based on the item response theory: Possibilities and challenges. *Journal of Computer Assisted Learning*, 26(6), 549-562.
- Webb, M., Doman, E., & Pusey, K. (2014). Flipping a Chinese university EFL course: What students and teachers think of the model. *The Journal of Asia TEFL*, 11(4), 53-87.
- Witten, H. (2013). World languages. In J. Bretzman (Ed.), *Flipping 2.0: Practical strategies for flipping your class* (pp. 26-280). New Berlin, WI: The Bretzman Group.

Yang, S. C., & Chen, Y. J. (2007). Technology-enhanced language learning: A case study. *Computers in Human Behavior*, 23(1), 860-879.

Appendix A: Speaking Test

1. What things would be important to you in choosing a job?
2. Do you prefer traveling by plane or by car? Why?
3. What's important to you when you buy clothes?
4. What do you use your computer for?
5. What is your phone's most interesting feature?
6. What would you do if your best friend told a lie about you?
7. What would you do if you found a wallet full of money?
8. What genres of movies do you like or dislike? Why?
9. What do you usually do to stay in shape?
10. What are the features of a good friend?

Appendix B: L2 Speaking Rating Scale.

Scoring range	Accuracy	Fluency	Interaction	Coherence
0-10	Uses some simple structures correctly, but still systematically makes basic mistakes.	Can make him/her understood in very short utterances, even though pauses, false starts, and reformulation are very evident	Can answer questions and respond to simple sentences.	Can link groups of words with simple connectors like 'and', 'but', and 'because'
10-20	Uses reasonably accurately a repertoire of frequently used routines and patterns associated with more predictable situations.	Can keep going comprehensibly, even though pausing for grammatical and lexical planning, and repair is very evident	Can initiate, maintain, and close simple conversations and discussions on topics that are familiar.	Can link a series of shorter, discrete, simple elements into a connected, linear sequence of points.
20-30	Show a relatively high degree of grammatical control. Does not make errors which cause misunderstanding, and can correct most of his/her mistakes.	Can produce stretches of language with a fairly even tempo; although he/she can be hesitant as he/she searches for patterns and expressions. There are noticeably few pauses.	Can initiate discourse, take his/her turn when appropriate and end conversations when he/she needs to.	Can use a limited number of cohesive devices to link his/her utterances into clear, coherent discourse, though there may be some jumpiness in a long contribution.
30-40	Consistently maintains a high degree of grammatical accuracy; errors are rare, difficult to spot, and generally corrected when they do occur.	Can express himself/herself fluently and spontaneously, almost effortlessly.	Can interact with almost ease and skill.	Can produce clear, smoothly flowing, well-structured speech.

Appendix C: Written Self-Report

Instruction: Please read the following questions carefully and answer them as sincerely as possible. There is no right or wrong answer.

- What is your opinion about the flipped in terms of time and effort you made, effectiveness, teaching method, and your communication skills?
- Did you face any problems during this experience in terms of materials, video contents, communication tool (i.e. Telegram) and activities?
- How do you think the flipped classroom you experienced can be improved?
- What was your favorite part of the flipped classroom?