



INVESTIGATING THE IMPACT OF FLIPPED TEACHING ON LANGUAGE PROFICIENCY AND SELF-EFFICACY OF IRANIAN INTERMEDIATE EFL LEARNERS

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Abstract

Flipped classroom is considered a great educational approach, in which the status of homework and classroom activities are reversed. The present thesis aimed to investigate the impact of flipped instruction on intermediate level EFL learners' general proficiency as well as academic self-efficacy. In order to answer the research questions, a number of 60 Iranian intermediate EFL learners studying at a Language Center in Sarabele, Ilam were chosen based on their performance in the QOPT. A pre-test, post-test equivalent group design was applied. As the next step of the study, through random assignment, the participants were assigned to either the experimental (flipped group), or the control group, 30 each. Then, Academic Self-Efficacy Scale by Morgan and Jinks (1999), was run among the participants in the two groups. Then, the treatment for the participants in the experimental group which was online teaching using the Edmodo network was applied. In the experimental group, the teacher delivered the materials through Edmodo; the teachers and learners worked on those materials; they discussed their problems and challenges in the process of learning. The experimental group was taught Top Notch 1 during the program. In the control group learners were provided with the conventional practices. The participants of this group were taught in the traditional classroom, in which the participants were not allowed to use their smartphones and the Internet. What follows is a discussion of the findings. The results of Independent-samples t-tests demonstrated significant differences between general proficiency and self-efficacy levels of the participants in the two groups when they were exposed to flipped method of teaching ($.05 > p$). The findings of the study can be used by L2 practitioners and teacher trainers to consider the role of technology in language teaching.

Keywords: Academic Self-Efficacy Scale, Edmodo Platform, Flipped teaching, Iranian Intermediate EFL Learners, Language proficiency, Self-efficacy.

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Introduction

For effective language teaching, different methods and instruments have been used (Higashi, Schunn, & Flot, 2017). Various factors affect the process of language teaching and learning in educational settings; one of which is new technologies. As noted by Mellati and Khademi (2019), researchers believe that social network systems can assist teacher learner interaction in the classroom. Anglin and Anglin (2008) note that many teachers are still teaching their students in the same manner as they were taught without paying attention to new technology-based methods. the concept of a flipped classroom is a great educational method where the position of homework and classroom activities is reversed.

In this method, instructional materials are presented online before the class, and L2 learners get engaged in an interactive process of critical problem-solving activities and learning, which are conducted under L2 teachers' supervision during the class (Herreid & Schiller, 2013). Flipped learning is a teaching approach that reverses the traditional classroom model. Jon Bergmann and Aaron Sams were American high school teachers who began 'flipping' their chemistry classes in 2007. Flipped learning typically (but not necessarily) involves watching videos online before students come to class, therefore it may also be considered a form of blended learning.

Utilizing various approaches and modes of instruction such as flipped language instruction may influence some psychological factors such as motivation and self-efficacy. Regarding the impact of flipped classrooms on learning language skills and sub-skills, several investigations have studied this topic. Li and Suwanthep (2017), Khodabandeh and Tahririan (2020), Riza and Setyarini (2019), and Sidky (2019) are some of the researchers who have studied the influence of flipped classrooms on language skills and sub-skills. In addition, Khosravani et al. (2010) and Namaziandost et al. (2020) investigated the influence of the flipped model on some psychological variables such as autonomy, self-efficacy, and motivation. However, to the best of the researchers' knowledge, no study has examined the influence of flipped instruction on EFL learners' academic self-efficacy.

Literature Review

E-learning, a modern approach to interactive L2 learning environments, includes educational methods presented through the Internet, intranets, audio/video tapes, interactive TV, and wireless learning applications. There

are two types of e-learning: synchronous and asynchronous. Synchronous e-learning requires simultaneous online interaction between L2 learners and teachers, while asynchronous e-learning allows learners to select the appropriate time and learn at their own pace. The flipped classroom is an educational approach that reverses the status of homework and classroom activities by presenting instructional materials online before class and engaging learners in critical problem-solving activities under the teacher's supervision. Flipped classrooms provide numerous benefits for L2 learners, including personalized learning, improved student-teacher interactions, increased motivation, improved learning engagement, and academic performance.

They also enhance student-oriented learning situations, allowing learners to actively engage in discussions, self-evaluate, and develop high-order thinking skills. However, the flipped classroom model has limitations, such as low motivation or negative learning habits, unclear separation between in-class and out-of-class activities, and challenges in feedback and assessment. To address these issues, educators suggest assigning pre-class quizzes on video materials and clearly describing different learning activities. Additionally, creative assessment methods are required to measure performance in individual tasks and group projects. Albert Bandura introduced the concept of self-efficacy in 1977, linking relationships to people, behaviors, and attainments. Self-efficacy is measurable, impactful, and successful in tasks related to endurance and motivation. It starts developing in the individual's first weeks of life and is influenced by factors like intimacy, skin touch, and protective physical and emotional situations. Wilson (2011) investigated how student academic performance influences self-efficacy, arguing that it is a thought-based skill rather than a physical skill. Perceived self-efficacy may differ significantly at different ages and learning environments. Research has shown that flipped classroom instruction can significantly improve learners' self-efficacy and academic motivation. This approach can be employed to develop academic motivation and self-efficacy and reduce academic deficiency among learners. Studies have shown that blended online and face-to-face classrooms can lead to more real-life language contexts for Iranian L2 learners. Flipped classroom instruction has been found to outperform traditional methods in reading self-efficacy and achievement.

Furthermore, flipped learning has been found to improve EFL learners' pragmatic knowledge and oral proficiency. Flipped teaching based on a MOOC has also been found to improve oral proficiency. The flipped model has been found to enhance cooperation and engagement, oral skills, and attitudes. So, flipped classrooms can make the teaching process more individualized, meeting the needs of learners at various levels. For example, flipped classrooms have been found to improve students' reading comprehension, listening comprehension, cooperation and engagement, oral skills, and attitudes. Furthermore, the flipped model has been found to make the teaching process more individualized, meeting the needs of learners at various levels.

In conclusion, flipped classrooms have shown promising results in improving self-efficacy and academic motivation among learners. Factors such as context, strategies, causal conditions, and confusing conditions can enhance outcomes in these classrooms. The flipped model in teaching is more individualized, effective in meeting learners' needs at different proficiency levels, and beneficial for students' academic performance, attitudes, and participation. However, previous research has shown mixed results, and the study aims to provide a comprehensive understanding of the potential benefits of this teaching model, particularly in English as a Foreign Language (EFL) learners' self-efficacy and general proficiency level. Regarding the impact of flipped classrooms on learning language skills and sub-skills, several investigations have studied this topic.

To determine the effectiveness of flipped classroom on L2 learning improvement, some researches have been carried out. For example, Fathi and barkhordar (2021) investigated the impact of flipped classroom on EFL learners' self-efficacy and reading achievement. The participants were 48 Iranian EFL learners assigned to a control group (N = 23) and an experimental group (N = 25). The experimental group was exposed to flipped instruction and the control group was exposed to regular method. The Reading Self-Efficacy Questionnaire (RSEQ) and the reading component of Cambridge Preliminary English Test (CPET) were used. The results showed that the participants in the flipped group outperformed those of the non-flipped group in reading self-efficacy and reading achievement.

In another study, Namaziandost, et al. (2020) examined the influence of flipped language instruction on learners' self-efficacy and the diversity in self-efficacy between males and females utilizing this instructional approach. To reach the objectives of the investigation, 66 advanced-level learners were chosen from a private English language institute. The participants were assigned into an experimental group (flipped classroom) and a control (traditional) group. In order to measure the participants' level of self-efficacy, a self-efficacy questionnaire was distributed among them before and after the instruction. The outcomes of the research revealed that in comparison with the traditional classroom, the participants of the flipped classroom could promote their level of self-efficacy. Considering the variable of gender, flipped instruction has a positive and significant impact on female learners' level of self-efficacy in comparison with male ones.

In a related study, Namaziandost and Çakmak (2020) searched the impact of flipped model of teaching on EFL learners' self-efficacy. The participants were 58 intermediate level EFL learners in a non-flipped and a flipped group. Self-efficacy scale was used to gather the data. The results showed a significant improvement in self-efficacy of the flipped group.

Moreover, Fallah, et al. (2020), investigated the influence of the flipped instruction in developing self-efficacy and academic motivation among high school students. For the purpose of the research, 30 female students were chosen based on purposive method of sampling from high schools of the city of Ahvaz. The participants then designated into a control group and an experimental group. Each group included 15 learners. In order to gather the required data of the study, the Academic Motivation Questionnaire and Student Self Efficacy Scale were employed. The learners of the experimental group were provided with the program of flipped instruction during eight sessions (each session lasted one hour and half). However, the learners of the control group were provided with the traditional approaches of instruction. To analyze the obtained data, the analysis of covariance (ANCOVA) was utilized. The outcomes showed that flipped instruction was efficient in enhancing self-efficacy and academic motivation among the participants. Moreover, the results revealed that the approach of flipped instruction can be employed to develop academic motivation and self-efficacy and reduce academic deficiency among learners.

Webb and Doman (2019) investigated attitudes about L2 learning in flipped classroom. The research was carried out in three tertiary-level contexts in USA and Macau, and in Colombia. The experimental groups in the three countries received reading previewing lessons through online videos. Ultimately, it was shown that the USA experimental group significantly performed better than the other groups.

Furthermore, Hashemifardnia, et al. (2018) investigated the impact of flipped instruction on reading comprehension of Iranian junior high school. To fulfill the goal of the research, 50 intermediate learners were chosen and were randomly assigned to a control and an experimental group. Then, they were requested to complete a test of 9 reading comprehension as pre-test. Then, the learners of the experimental group were put in a flipped classroom. The participants were asked to read passages before the class and talk about it in groups. On the contrary, the learners of the control group were instructed traditionally in their classes. Before instructing each passage, they were provided with background information and after that, they were told to reply some questions associated with the passage. After completing the period of instruction, the reading comprehension test was administered to the learners as post-test. The findings demonstrated the participants of the experimental group outperformed better the control group.

In another related study, Haghighi, et al., (2018) investigated the impact of flipped learning on EFL learners' pragmatic knowledge of 60 EFL learners from two universities located in Iran. They used a discourse completion test (DCT). It was shown that the flipped group was engaged more actively with the course contents.

In another study, Wanga, et al., (2018) investigated if flipped teaching based on a MOOC had any impact on Chinese Foreign Language learners' oral proficiency. The participants' level of accuracy, complexity and fluency. It was shown that L2 learners exposed to flipped instruction significantly performed better in oral proficiency in many aspects. A review of the existing literature suggests that not many studies have so far investigated the impact of flipped classroom on self-efficacy and general proficiency of EFL learners. Accordingly, the present study aimed to answer the following research questions:

- Does flipped instruction have a significant influence on Iranian pre-intermediate level EFL learners' general proficiency?
- Does flipped instruction have a significant influence on Iranian pre-intermediate level EFL learners' academic self-efficacy?

Methodology

Research Design

The objective of the present study was to study the effect of flipped language teaching on Iranian EFL learners' self-efficacy. In addition, it intended to study the effects of flipped language teaching on Iranian EFL learners' general proficiency level. The dependent variables under study included EFL learners' general proficiency and their level of self-efficacy and the independent variables were flipped and traditional modes of learning. Based on the three research questions, a quantitative research design was used. In fact, a quantitative quasi-experimental method was used. Primary source data collection was employed. In other words, the data were gathered from comparison of scores obtained from participants in two groups. In addition, this research used a quasi-experimental method in that it employed both experimental approaches and analyses of quantitative data. Accordingly, a quantitative experimental method was used to study two experimental groups of participants. A pre-test, post-test equivalent group design which is one of the sub branches of quasi experimental research design was used.

Participants

To conduct this research, a number of 60 EFL learners from a language institute in Sharable, Iran took part in the study. 30 participants were male and 30 others were females. In fact, simple-random sampling was employed to choose the sample. A Quick Oxford Placement Test (QOPT) was distributed among the whole number of learners in a language institute and based on their scores 60 EFL learners whose level of proficiency was intermediate were chosen. According to the results of this test, from among those L2 learners who scored within the range of 91-120, 60 were selected as the target participants of the current research. The participants were randomly assigned to experimental and control groups, with 30 in each group. As mentioned, the QOPT was administered to both classes to exclude the students who were not at intermediate level. The participants

were intermediate EFL learners and their age ranged from 16-20, with a mean age of 18.3. Participation was voluntarily. They were told about the study. In addition, they were ensured about the confidentiality of the data.

Instruments

This research utilized QOPT, the Academic Self-Efficacy Scale, a general proficiency test, the Edmodo Platform, and SPSS to answer research questions.

Academic Self-Efficacy Scale

Academic self-efficacy scale developed by (Jinks & Morgan, 1999) was utilized to quantify the EFL students' level of self-efficacy. This scale includes 30 items getting some information about their own capacities in English language. Four subscales are measured for the survey, in particular self-efficacy for four language skills. It is a 4-point Likert scale in which the learners are approached to answer 30 items going from 1=really agree, 4= really disagree The higher scores showed the more significant level of English self-efficacy. In the present research, a few items were changed. results of confirmatory factor analysis showed that the model was fit ($\chi^2 = 68.40$, $DF = 40$, and $RMSEA = .061$). For the reliability of the was calculated. The Cronbach's Alphas Internal consistencies were .81 for the academic self-efficacy scale.

The participants were told that the questions in the survey aimed to investigate their judgement of their capacities, so there would be neither right nor wrong answers. It took the participants 15-20 minutes to complete it. In Iran, Karimzadeh and Mohseni (2006) reported desirable factor analysis validity for this scale. The reliability of this questionnaire, determined by Cronbach's alpha, was 0.76. In the present study, the questionnaire's reliability was also confirmed using Cronbach's alpha ($\alpha > 0.7$).

Edmodo Platform (Flipped-Based Educational Program)

Edmodo is a student-friendly platform where teachers and students can share ideas, content, and homework. It requires no personal information from students and requires invitations. In this research, Edmodo was used to present content to experimental group participants. Users can create groups, invite others, send and receive messages, and create folders. Media shared is automatically saved in a My Library section.

Procedure

Given that the nature of the study determines the research design, and considering the questions of the study, a quasi-experimental design was adopted in this study. The research questions intended to investigate the effect of using flipped learning model on Iranian intermediate L2 learners' general proficiency as well as their level of self-efficacy. This study investigated flipped classroom as an independent variable and L2 Learners' self-efficacy and their level of general proficiency as dependent variables which were affected by the independent variable. The gathered data were analyzed using independent samples t tests. The necessary data were gathered through self-efficacy scale and general proficiency tests.

At the outset of the study, having obtained the consent of the officials, the researcher attended some classes in an institute. During the introductory session, the goal of the study was explained. They showed their willingness to cooperate in this study. Later, the QOPT was given to the participants, and a number of 60 of those who were identified to be at intermediate level were chosen as the main participants. In fact, the purpose of this test was to select those participants who were at intermediate level. As the next step of the study, through random assignment, the participants were divided into the flipped group or the control group, 30 each. Then, self-efficacy scale was run among the participants.

The next phase of the study was enhancing participants' literacy in technology use. Being familiar with the online platform could affect their performance; therefore, the researcher taught the learners how to work with the Edmodo platform. Then, the treatment was applied; the experimental group was taught online using the Edmodo network. They were asked to watch the video clips and take part in the related quiz online before attending the face-to-face class. In the experimental group, the teacher delivered the materials through Edmodo; the learners and teachers worked on those teaching materials; they discussed their challenges and problems in the process of learning. The treatment was one and half month in the experimental group, every other day online sessions. The experimental group was taught Top Notch 1 during the program.

The participants in the control group were provided with the lessons. The participants of this group were taught in the traditional classroom, in which

the participants were not allowed to use their smartphones and the Internet. The treatment was one and half month, three sessions per week. The group was taught Top Notch 1. When the treatment was finished, the self-efficacy scale was run to the participants of both groups. In order to investigate the impacts of flipped learning on language proficiency of the participants, the QOPT was run at the end of the treatment of its scores were compared with the scores obtained before the treatment.

Results

Effect of Flipped Instruction on Iranian EFL Learners' General Proficiency

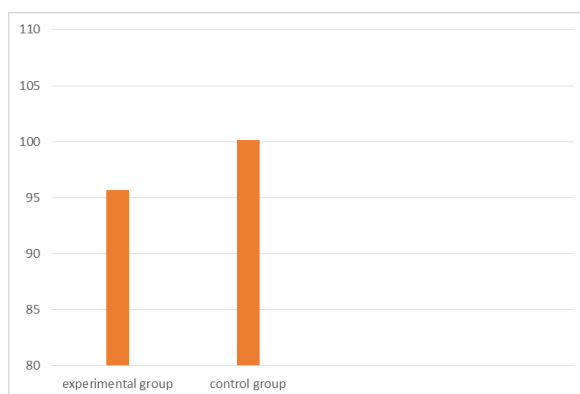
The first research question of the present thesis aimed to investigate if flipped instruction had any significant influence on Iranian intermediate level EFL learners' general proficiency. In order to answer this research question, a general proficiency was administered, then, the participants were exposed to flipped instruction, and following that the general proficiency test was conducted as the post test. In this section the scores of the participants in the pre and post tests are compared. Table 1 presents the descriptive statistics of the comparison of pre and post test scores.

Table 1. Descriptive Statistics of Pre test Scores

Groups	N	Mean	Std. Deviation	Std. Error Mean
experimental group	30	95.7000	16.45296	3.00389
Control group	30	100.13	7.95562	1.45249

Table 1 gives the mean scores of the pre and post test scores. As shown, the mean score of the control group participants was 100.13 and that of the other group was 95.7. Figure 1 depicts the results.

Figure 1. Mean Comparison of Pre-test Scores



In order to identify the (in)significance of the mean difference between the two groups, an independent samples t-test was administered, the results are presented in Table 2.

Table 2. Independent Samples Test Results for Pre-test Scores

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
score	Equal variances assumed	.049	.826	-1.329	58	.189	-4.43333	3.33662	-11.11231	2.24565
	Equal variances not assumed			-1.329	41.85	.191	-4.43333	3.33662	-11.16759	2.30093

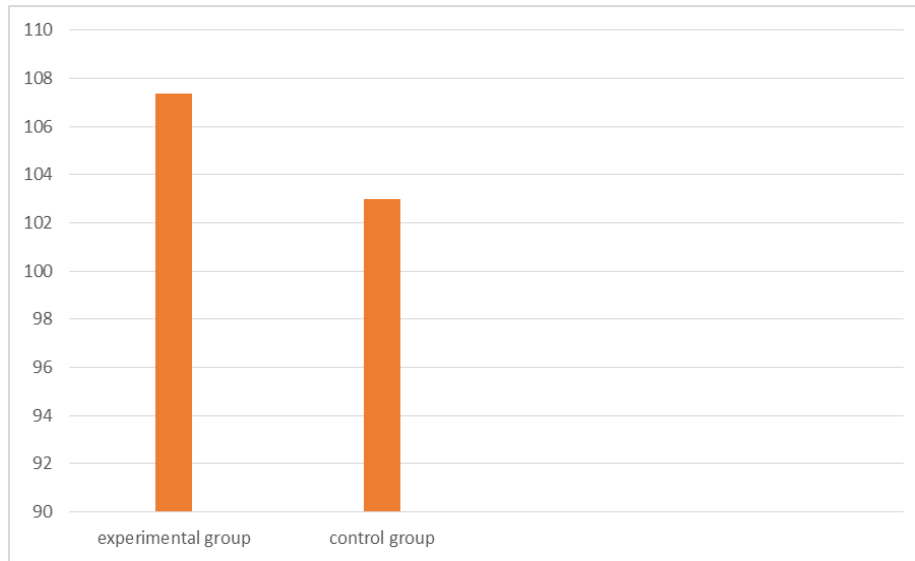
Based on the results, the significance level is .189 which is higher than the identified level of significance ($.05 < .189$). Therefore, it was identified that there was not any significant difference between the performance of the participants in both groups at the beginning of the study. As mentioned earlier, the participants were exposed to the treatment, and after that the post test was administered. The following section is the analysis of the gathered data. Table 3 presents the descriptive statistics of the findings.

Table 3. Descriptive Statistics of Post-test Scores

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Scores	Experimental Group	30	107.372	8.01930	1.46412
	Control Group	30	102.972	6.15032	1.12289

According to the results presented in Table 3, the mean difference of experimental and control group test scores is 6.4 (experimental group mean score being 107.37 and that of control group being 102.97). Figure 2 presents the results.

Figure 2. Mean Comparison of Post-test Scores



In order to check the (in)significance, an *independent samples t-test* was administered. Table 4 presents the results.

Table 4. Independent Samples Test Results for Post-test Scores

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	5.625	.021	2.385	58	.017	4.40000	1.84513	.70656	8.09344
Equal variances not assumed			2.385	54.346	.017	4.40000	1.84513	.70127	8.09873

The identified level of significance is smaller than .05 ($.020 < .05$). This shows the fact that the difference between the performance of the participants in the two groups was statistically significant after the treatment. This led to the rejection of the first null hypothesis of the research stating that flipped

instruction does not have any significant influence on Iranian intermediate level EFL learners' general proficiency.

Effect of Flipped Instruction on Iranian EFL Learners' Self-efficacy

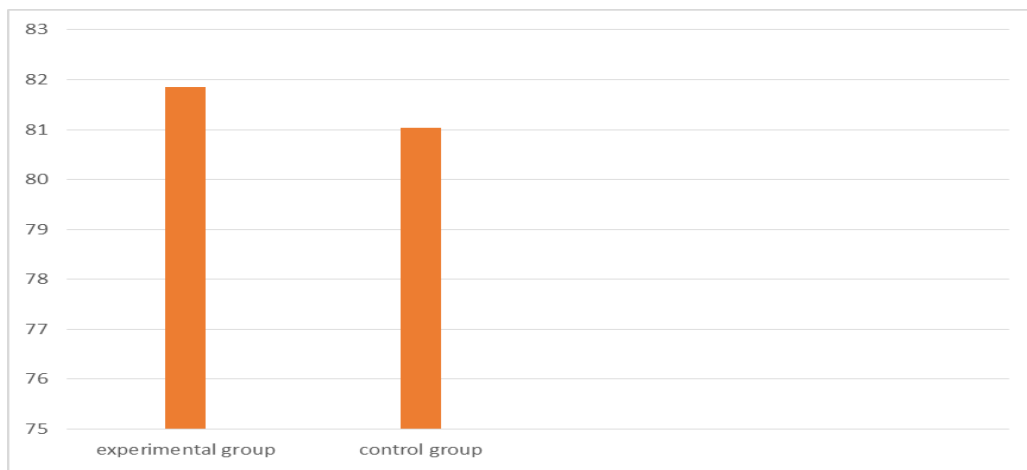
The second question, aimed to investigate if flipped instruction had any influences on Iranian intermediate level EFL learners' academic self-efficacy. In order to answer this research question, Academic self-efficacy scale developed by (Jinks & Morgan, 1999) was utilized to quantify the EFL students' level of self-efficacy. In this section, the results of the analysis are given.

Table 5. Descriptive Statistics of Self Efficacy Scores before Treatment

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Scores	Experimental Group	30	81.8667	16.72853	3.05420
	Control Group	30	85.0333	15.86904	2.89728

As shown in Table 5, the mean difference of self-efficacy scores was found to be 4.77 (the mean for the experimental group scores being 81.86 and that of control group post test scores being 85.03) which is not statistically significant. The mean difference of the performance of the two groups is shown in figure 3.

Figure 3. Mean Comparison of Self-efficacy Scores Before Treatment



As depicted in Figure 3, the two columns showing the mean scores were approximately the same length. In order to make sure that the difference

was the (in)significance, an *independent samples t-test* was administered, though. Table 6 presents the results.

Table 6. Independent Samples Test Results for Self-efficacy Scores before Treatment

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Scores	Equal variances assumed	.000	.986	-.752	58	.455	-3.16667	4.20979	11.59348	5.26014
	Equal variances not assumed			-.752	57.839	.455	-3.16667	4.20979	11.59398	5.26064

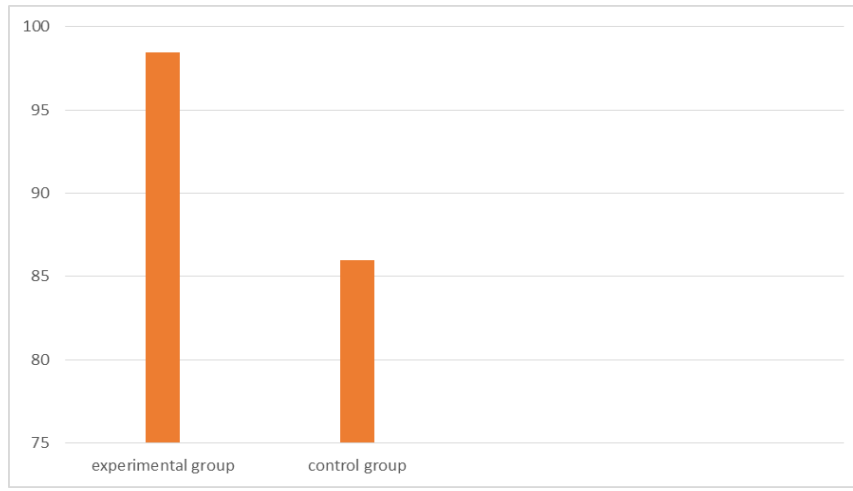
The level of significance is .455 which is higher than the identified level of significance .05 (.05<.45). This shows the difference between the level of self-efficacy was not statistically significant. After the treatment, the self-efficacy scale was administered once more, the statistical results of which are presented in Table 7.

Table 7. Descriptive Statistics of Self Efficacy Scores after Treatment

		Groups	N	Mean	Std. Deviation	Std. Error Mean
Scores	Experimental Group		30	98.4767	17.34186	3.16618
	Control Group		30	85.9667	16.93900	3.09263

Table 7 reveals that the mean scores of the experiential group participants in their level of self-efficacy was higher than that of control group; thus the mean difference of the two groups seems to be significant. Figure 4 depicts the mean difference.

Figure 4. Mean Comparison of Self efficacy Scores after Treatment



As depicted in Figure 4.6, the experimental group’s mean score of the self-efficacy was higher than that of control group; however, to make sure of the (in)significance of the difference, the results of *independent samples t-test* are presented in Table 8.

Table 8. Independent Samples Test Results for Self-efficacy Scores after Treatment

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.000	.986	2.824	58	.006	12.50000	4.42595	3.64051	21.35949
scores Equal variances not assumed			2.824	57.968	.006	12.50000	4.42595	3.64040	21.35960

According to Table 8, the level of significance is .006 which is smaller than the identified level of significance (.006 < .05). This shows that the differences between the mean scores of the two groups was significant. This led to the rejection of the second null hypothesis stating flipped model does not have a significant influence on Iranian intermediate level EFL learners' academic self-efficacy.

Discussions

The study investigates the impact of flipped learning on Iranian pre-intermediate level EFL learners' general proficiency. Results show a significant effect of the flipped model on learners' general proficiency and self-efficacy levels. The study attributed the effectiveness of flipped instruction to Krashen's affective filter hypothesis, which suggests that language learning can be influenced by factors such as self-efficacy, anxiety, motivation, and stress.

Flipped learning provides a flexible learning environment, allowing learners to match their time with the course content and receive immediate feedback. The flipped classroom model also allows for different communication methods, allowing for better collaboration and access to materials and feedback. The study's findings align with previous studies proving the advantages of flipped classrooms, such as personalized learning, student-teacher interactions, increased motivation, improved learning engagement, and academic performance.

Additionally, flipped learning can improve active learning habits and student-oriented learning situations. Flipped instruction is more effective than traditional face-to-face classes in improving general proficiency and self-efficacy levels in English as a Foreign Language (EFL) learners.

This approach offers flexibility, student-centered learning, and scaffolding, allowing learners to meet their needs outside the classroom. The flipped model also facilitates learning in small groups, with L2 teachers helping learners find necessary tools. The findings align with previous studies on flipped classrooms, such as those by Hsieh, Wu, and Marek (2016), Webb and Doman (2019), Haghighi et al. (2018), Wanga, An, and Wright (2018), and Mellati and Khademi (2018). Previous studies have also shown the effectiveness of flipped classrooms on different language skills, such as reading comprehension, grammar, listening comprehension, and

vocabulary knowledge. Overall, flipped instruction is a more effective and effective method for improving language proficiency in EFL learners.

Conclusion and Implications

According to Agarwal (2013), the pioneers of flipped classrooms are moving towards adapting large classrooms to small classrooms, to create a blended model of learning. To address flipped challenges, the new design of flipped can solve some of the problems of other language teaching tools and procedures (Bruff et al., 2013). This model can integrate interactions into the flipped environment, it can support the interactive design of the online lectures, replace the student-centered process, provide assessment and feedback, and consider the different patterns of participants in flipped models (Yousef et al., 2015).

The current paper researched the effects of flipped learning on developing general proficiency and self-efficacy in Iranian L2 settings. The findings affirmed the benefit of this kind of learning over regular face-to-face learning settings. The outcomes uncovered that the students in the experimental group performed better than those of the students in the control group.

References

- Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: Definition, rationale and a call for research. *Higher Education Research and Development*, 34(1), 1-14.
- Admiraal, W., Huisman, B., & Pilli, O. (2015). Assessment in massive open online courses. *Electronic Journal of E-Learning*, 13(4), 207-216.
- Adnan, M. (2017). Perceptions of senior-year ELT students for flipped classroom: A materials development course, *Computer Assisted Language Learning*, 12(2),34-50.
- Aksal, F. A. (2009). Action plan on communication practices: Roles of tutors at EMU distance education institute to overcome social barriers in constructing knowledge. *TOJET: The Turkish Online Journal of Educational Technology*, 8(2), 34-35.
- Akyol, Z., Garrison, D. R., & Ozden, M. (2009). Online and blended community of inquiry: Exploring the developmental and perceptual

- differences. *The International Review of Research in Open and Distance Learning*, 10(6), 68-53.
- Aldrich, F., Rogers, Y., & Scaife, M. (1998). Getting to grips with "interactivity": Helping teachers assess the educational value of CD-ROMs. *British Journal of Educational Technology*, 29(4), 321-332.
- Al-Jarf, R. (2008). Teaching vocabulary to EFL college students online. *CALL-EJ Online*, 8(2), 31-41.
- Al-Musa, A., & Al-Mobark, A. (2005). *E-learning the fundamentals and the implementations*. Riyadh: Data Net.
- Al-Zahrani, A. J. (2008). *Designing and implementing interactive computer software for educational technology course to measure its impact on the academic achievement of teacher colleges students at Albaha zone*. Unpublished doctoral dissertation, University of Umm Al-Qura, Saudi Arabia.
- Anglin, L., & Anglin, K. (2008). Business education, teaching, and the millennials. *The Academy of Business Disciplines*, 3, 26-42.
- Anja, S. N., & Ngwo, S. (2007). Information and communication technology as synergy for sourcing distance education: The feasibility in Cameroon education system. *Educational Research and Reviews*, 2(12), 296-301.
- Assadi A. F., Sadeghian, S. S., & Kordabadi, F., S. (2017). Effects of flipped classroom approach on EFL learners' reading performance with different cognitive style. *Journal of Applied Linguistics and Language Research*, 4(6), 98-104.
- Bahmani, M., Javadipour, M., Hakimzade, R., Salehi, K., & AlaviMoghaddam, S. (2017). Evaluating the rate of engagement and academic achievement of high school students by using flipped classroom instruction. *Applied Psychological Research Quarterly*, 8(2), 35-49.
- Bandura, A. (1997). The anatomy of stages of change. *American journal of health promotion: AJHP*, 12(1), 8-10.
- Bishop, J., & Verleger, M. A. (2013). *The flipped classroom: A survey of the research*. In 2013 ASEE Annual Conference & Exposition. Atlanta, Georgia.

- Blurton, C. (1999). *New directions of ICT-use in education*. UNESCO's World Communication and Information Report 1999.
- Burke, A. S., & Fedorek, B. (2017). Does "flipping" promote engagement? A comparison of a traditional, online, and flipped class. *Active Learning in Higher Education*, 18(1), 11-24.
- Carlson, M. (1997). Genetics of transcriptional regulation in yeast: connections to the RNA polymerase II CTD. *Annu Rev Cell Dev Biol*, 13, 1-23
- Cappel, J. J., & Hayen, R. L. (2004). Evaluating e-learning: A case study. *Journal of Computer Information Systems*, 44(4), 49-56.
- Chou, S. W., & Liu, C. H. (2005). Learning effectiveness in a Web-based virtual learning environment: A learner control perspective. *Journal of Computer Assisted Learning*, 21(1), 65-76.
- Clark, C., & Gruba, P. (2010). The use of social networking sites for foreign language learning: An auto ethnographic study of live mocha. *Curriculum, Technology, & Transformation for an Unknown Future*, 164-173.
- Correa, M. (2015). Flipping the foreign language classroom and critical pedagogies: A (new) old trend. *Higher Education for the Future*, 2(2), 114-125.
- Curtain, R. (2001). Promoting youth employment through information and communication technologies (ICT): Best practice examples in Asia and the Pacific. In *ILO/Japan Tripartite Regional Meeting on Youth Employment in Asia and the Pacific*. Bangkok.
- Dill, E. (2012). *The impact of flip teaching on student homework completion, behavior engagement and proficiency*. Armidale: University of New England.
- DeTure, M. (2004). Cognitive style and self-efficacy: Predicting student success in online distance education. *American Journal of Distance Education*, 18(1), 21-38.
- Ellis, R. (2004). A field guide to web conferencing. *Learning Circuits*, 5(8), 23-58.

- Fathi, J., Barkhoda, J. (2021). Exploring the effect of the flipped classroom on EFL learners' reading achievement and self-efficacy. *Foreign Language Research Journal*, 11 (3), 435-452.
- Farhadi, M., Salehi, H., Embi, M. A., Fooladi, M., Farhadi, H., AghaeiChadegani, A., & Friesen, N. (2012). *Report: Defining blended learning*. Retrieved July 14, 2019, from <http://learningspaces.org/papers/Defining Blended LearningNF.pdf>.
- Garrison, D. R., & Vaughan, N. (2008). *Blended learning in higher education: Framework, principles and guidelines*. San Francisco, CA: Jossey-Bass.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2, 87-105.
- Ghabanchi, Z., & Anbarestani, M. (2008). The effects of CALL program on expanding lexical knowledge of EFL Iranian intermediate learners. *The Reading Matrix*, 8(2), 86-95.
- 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*, 12(3), 23-39.
- Hassan, R., E., H. (2010). Software application for computer aided vocabulary learning in a blended learning environment. *Annual Review of Applied Linguistics*, 22, 171-185.
- Herreid, C. F., & Schiller, N. A. (2013). Case studies and the flipped classroom. *Journal of College Science Teaching*, 42(5), 62-66.
- Higashi, R. M., Schunn, C. D., & Flot, J. B. (2017). Different underlying motivations and abilities predict student versus teacher persistence in an online course. *Educational Technology Research and Development*, 65(6), 1471-1493.
- Horton, W. (2006). *E-learning by design*. San Francisco: Pfeiffer.
- Hrastinski, S. (2008). Asynchronous and synchronous e-learning. *Educause Quarterly*, 4(31), 51-55.
- Hsieh, J. S., Wu, W. C. V., & Marek, M. W. (2016). Using the flipped classroom to enhance EFL learning. *Computer Assisted Language Learning*, 2(3), 1-25.

- Hsu, C. C., & Wang, T. I. (2014). Enhancing concept comprehension in a web-based course using a framework integrating the learning cycle with variation theory. *Asia Pacific Education Review, 15*, 211-222.
- Hung, H. T. (2015). Flipping the classroom for English language learners to foster active learning. *Computer Assisted Language Learning, 28*(1), 81-96.
- Hsieh, J. S., Wu, W. C. V., & Marek, M. W. (2016). Using the flipped classroom to enhance EFL learning. *Computer Assisted Language Learning, 2*(3),1-25.
- Johnson, D.W. & Runner, R.T. (2010). Learning together and alone: Overview and meta-analysis. *Asia Pacific Journal of Education, 22*(1), 95-105.
- Kaviani, H., Liaghatdar, M. J., Zamani, B. B., & Abediny, Y. (2017). The learning process in the flipped classroom: A representation of experienced curriculum in higher education. *Journal of Higher Education Curriculum Studies, 8*(15), 179 -214.
- Kaya, T. (2006). *The effectiveness of adaptive computer uses for learning vocabulary*. Unpublished doctoral dissertation, Northern Arizona University. Arizona, The USA.
- Keegan, D. (2008). The impact of new technologies on distance learning students. *E-Learning & Education, 4*, 34-41.
- Khamkhien, A. (2012). Computer assisted language learning and English language teaching in Thailand: Overview. *Mediterranean Journal of Social Science, 3*(1), 55-64.
- Kheirabadi, R. (2017). The effects of flipped classroom on learning grammar among grade 10 high school students. *Journal of Educational Innovations, 64*, 141-163.
- Kim, D. (2017). Flipped interpreting classroom: flipping approaches, student perceptions, and design considerations. *The Interpreter and Translator Trainer, 11*(1), 38-55.
- Kim, M., Kim, S., Khera, O., & Getman, J. (2014). The experience of three flipped classrooms in an urban university: An exploration of design principles. *The Internet and Higher Education, 22*, 37-50.

- Kinshuk, T., Suhonen, J., Sutinen, E., Goh, T. (2003). Mobile technologies in support of distance learning. *Asian Journal of Distance Education*, 1(1), 60-68.
- Kong, S. (2014). Developing information literacy and critical thinking skills through domain knowledge learning in digital classroom: An experience of practicing flipped classroom strategy. *Computers and Education*, 78, 160-173.
- Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon Press.
- Lage, M. J., Platt, G. J., & Treglia, M. (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. *The Journal of Economic Education*, 31(1), 30-43.
- Marlowe, C. A. (2012). The effect of the flipped classroom on student achievement and stress. Unpublished master's thesis, Montana State University, Bozeman, MT.
- Mellati, M., & Khademi, M. (2018). MOOC-based educational program and interaction in distance education: Long life mode of teaching. *Interactive Learning Environments*, 4, 1-14.
- Mellati, M., & Khademi, M. (2019). Technology-based education: Challenges of blended educational technology. In M. Habib (Ed.), *Advanced online education and training technologies* (pp. 48-62). New York, NY: IGI Global.
- Nordin, N., Embi, M. A., & Yunus, M. M. (2010). Mobile learning framework for lifelong learning. *Procedia-Social and Behavioral Sciences*, 7, 130-138.
- Oh, E., & French, R. (2004). Pre-service teachers' perceptions of an introductory instructional technology course. *Electronic Journal for the Integration of Technology in Education*, 3(1), 37-48.
- Oliner, S. D., Sichel, D. E., Triplett, J. E., & Gordon, R. J. (1994). Computers and output growth revisited: How big is the puzzle? *Brookings Papers on Economic Activity*, 1994(2), 273-334.
- Poole, A. (2008). The relationship of reading proficiency to online strategy use: A study of US college students. *Journal of College Literacy and Learning*, 35, 3-12.

- Qi, G. Y., & Wang, Y. (2017). Investigating the building of a WeChat based community of practice for language teachers' professional development. *Innovation in Language Learning and Teaching*, 12(1), 72-88.
- Richter, T., & McPherson, M. A. (2012). Open educational resources: Education for the world? *Distance Education*, 3(2), 201-219.
- Salehi, H., & Salehi, Z. (2012a). Challenges for using ICT in education: Teachers' insights. *International Journal of E-Education, E-Business, E-Management and E-Learning*, 2(1), 40-43.
- Salehi, H., & Salehi, Z. (2012b). Integration of ICT in language teaching: Challenges and barriers. *Proceedings of the 3rd International Conference on e-Education, e-Business, e-Management and e-Learning (IC4E, 2012), IPEDR* (Vol. 27, pp. 215-219).
- Samah, E., & Saka, M. (2016). The relationship between listening comprehension problems and strategy usage among advance EFL learners. *Cogent Psychology*, 6(1), 1-19.
- Santagata, R. (2009). Designing video-based professional development for mathematics teachers in low-performing schools. *Journal of Teacher Education*, 60(1), 38-51.
- Shea, P., & Bidjerano, T. (2013). Understanding distinctions in learning in hybrid, and online environments: An empirical investigation of the community of inquiry framework. *Interactive Learning Environments*, 21(4), 355-370.
- Strayer, J. (2012). How learning in an inverted classroom influences cooperation, innovation, and task orientations. *Learning Environments Research*, 15(2), 171-193.
- Sussman, S. (2006). One-year outcomes of a drug abuse prevention program for older teens and emerging adults: Evaluating a motivational interviewing booster component. *Health Psychology*, 31(4), 476-485.
- Sweeny, S.M. (2010). Writing for the instant messaging and text messaging generation: Using new literacies to support writing instruction. *Journal of Adolescent and Adult Literacy*, 54(2), 121-130.

- Szparagowski, R. (2014). *The Effectiveness of the flipped classroom*. Retrieved August 20, 2019, from the World Wide Web: <https://scholarworks.bgsu.edu>.
- Swain, M. (1985). Communicative competence: Some rules of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235-253). Rowley, MA: Newbury House.
- Taipjutorus, W., Hansen, S., & Brown, M. (2012). Investigating a relationship between learner control and self-efficacy in an online learning environment. *Journal of Open, Flexible, and Distance Learning*, 16(1), 56-69.
- Tehrani, N.S., & Tabatabaei, O. (2012). The impact of blended online-learning on Iranian EFL learners' vocabulary achievement. *International Electronic Journal for the Teachers of English*, 2, 5-19.
- Thierer, A. (2000). How free computers are filling the digital divide. *Heritage Foundation Backgrounder*, 1361, 1-21.
- Tucker, B. (2012). The flipped classroom. *Education Next*, 12(1), 82-83.
- Unwin, A. (2007). The professionalism of the higher education teacher: What's ICT got to do with it? *Teaching in Higher Education*, 12(3), 295-308.
- Wallace, A. (2013, September). Social learning platforms and the flipped classroom. In *e-Learning and e-Technologies in Education (ICEEE), 2013 Second International Conference on* (pp. 198-200), IEEE.
- Wang, J., An, N., & Wright, C. (2018). Enhancing beginner learners' oral proficiency in a flipped Chinese foreign language classroom. *Computer Assisted Language Learning*, 12, 12-25.
- 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.
- Westera, W., & Sloep, P. B. (2001). *The future of education in cyber space*. Larchmont, NY: Mary Ann Liebert, Inc, 115-136.
- Williams, J., Inscoc, R., & Tasker, T. (1997). Communication strategies in an interactional context: The mutual achievement of comprehension. In

- G. Kasper & E. Kellerman (Eds.), *Communication strategies* (pp. 304-322). Essex, UK: Longman.
- Wilson, S. G. (2013). The flipped class: A method to address the challenges of an undergraduate statistics course. *Teaching of Psychology, 40*, 193-199.
- Yang, M., Shao, Z., Liu, Q., & Liu, C. (2017). Understanding the quality factors that influence the continuance intention of students toward participation in MOOCs. *Educational Technology Research and Development, 65*(5), 1195-1214.
- Yoshida, H. (2016). Parasteatoda, Campanicola, Cryptachaea, and two new genera (Araneae: Theridiidae) from Japan. *Bulletin of the Yamagata Prefectural Museum, 34*, 13-30.
- Young, S. S. C. (2003). Integrating ICT into second language education in a vocational high school. *Journal of Computer Assisted Learning, 19*(4), 447-461.
- Yunus, M. M., Nordin, N., Salehi, H., Sun, C. H., & Embi, M. A. (2013). Pros and cons of using ICT in teaching ESL reading and writing. *International Education Studies, 6*(7), 119-127.
- Yunus, M.M., &Salehi, H. (2012a). The effectiveness of Facebook groups on teaching and improving writing: Students' perceptions. *Journal of Education and Information Technologies, 1*(6), 87-96.
- Yunus, M. M., &Salehi, H. (2012b). Tumblr as a medium to improve students' writing skills. *Journal of Applied Sciences Research, 8*(1), 383-389.
- Yunus, M. M., Salehi, H., &Chenzi, C. (2012). Integrating social networking tools into ESL writing classroom: Strengths and weaknesses. *English Language Teaching, 5*(8), 42-51.
- Zappe, S., Leicht, R., Messner, J., Litzinger, T., & Lee, H. W. (2009). Flipping the classroom to explore active learning in a large undergraduate course. *Learning Environment Research, 15*, 171-193.