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Flipped Instruction and Its Potential to Control Foreign Language Classroom Anxiety Through Shad Application

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Abstract

Flipped instruction has been shown to be effective in improving learning. However, this improvement might come at a cost. Since the responsibility for preparing is shifted to students, there is also a risk of augmenting learners' anxiety. This study was an attempt to check the effects of flipped instruction through shad application on foreign language classroom anxiety among Iranian English learners. 120 male pre-intermediate English language learners constituted the main participants of this study. The participants were randomly assigned to one control and three experimental groups based on their performance on an Oxford Placement Test (OPT). The instruction provided for the control group was conventional instruction while the first experimental group received traditional flipping, the second group received demonstration-based instruction, and the third experimental group received double-flipped instruction for eight sessions, each lasting for 45 minutes. Data collection was done using pretests and posttests of foreign language classroom anxiety (FLCA); the results of ANCOVA revealed that all the three types of flipped learning had more positive effects than conventional instruction on reducing the learners' anxiety level; however, there were no meaningful differences among the three types of flipping. The results of this study might be valuable for English learners and teachers, materials writers, and curriculum developers. The choice of the right kind of teaching materials and instructional techniques can help reduce learners' anxiety.

Keywords: flipped instruction, foreign language classroom anxiety, Shad application

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Introduction

Aydin (2008) believes that feeling anxious can really affect how well one learns a new language. For over half a century, foreign language (FL) research has focused on how anxiety affects learning a new language. Earlier research has found that teaching an FL can be more stressful than other subjects in education. Horwitz et al. (1986) define FL anxiety as how students see themselves, what they believe, how they feel, and how they act when learning a new language in class. This happens because learning a new language is different from other subject areas. MacIntyre and Gardner (1991) are of the opinion that language anxiety is feeling worried and nervous when using or learning a second language.

MacIntyre and Gadner (1991) contend that anxiety can cause substantial problems for students learning a new language. It can make it hard for them to learn, remember, and use the new language. Scientists have looked at why students have a hard time learning a new language and have done many studies to figure out how to help them with the problems they have found (Sahoo & Sinha, 2020). It is clear that every student comes to a language class feeling differently and with different levels of motivation. Some students are excited to learn a new language, while others are worried about it (Mahboudi, 2019). Basically, how much students want to learn a foreign language, their feelings about it, and how nervous they are can all affect how well they do in the class. Anxiety can make it hard to learn languages, do well in school, and feel good about yourself (Zarei & Rahmaty, 2021). Horwitz et al. (1986) reported that researchers were not able to accurately explain anxiety when learning a new language and understand how it affects language learning. Previous research on FL anxiety has mainly looked at being nervous when speaking, instead of other language skills and components. People used to think that speaking was the scariest skill to learn, but then they realized other language skills could also make people anxious.

Zarei and Rahmaty (2021) point out that in recent years, more and more researchers have been studying ways to help language learners feel less worried and do better in learning languages. According to Rajabi et al., (2021), about half the people learning a foreign language feel some level of anxiety. This was noted by Gok et al. (2021), who observed that people who worry a lot about learning a new language might not enjoy studying it, and this may further exacerbate their performance.

Chen and Hwang (2020) found that when teachers are in control, students feel more anxious about learning a foreign language. If this is so, flipped learning could be a good way to change the way students practice. Instead of doing practice at home, they do it in class, and they can watch lectures at home. In flipped learning, students learn new things and study on their own before coming to class. People learn better when they study alone, but they also learn well when they study with others, when they learn with friends or the teacher. In regular schools, students might be scared to mess up in class, not want to talk, and worry about being judged by their classmates or teachers. This can make them more anxious. Homework can also make students feel worried about learning a new language. Actually, Roehl et

al. (2013) have mentioned that teaching in schools and giving homework might not be what students need in today's classes. As Goodwin and Miller (2013) admit, teachers give students work to do, but sometimes it is really hard, and students feel quite frustrated and confused. The essence of their argument is that when the teacher is in control of learning, it can make it harder for students to think critically and develop more anxiety when learning a new language.

As Gustian et al. (2023) propose, the flipped classroom is a new way of teaching that teachers are using more frequently nowadays. This is not like the usual way of teaching, where teachers mostly explain things in class. Students need to watch a video before class that has the information they will talk about in class. The teacher wants the students to join in and work with their classmates during class. Gustian et al. (2023) believe that the flipped classroom model (FCM) can help people learn English as a foreign language. They also mention that some experts have discovered benefits from their own research proving that EFL learners can be helped by something called FCM in education. Despite such claims (as well as pieces of evidence) supporting the effectiveness of flipped instruction in improving language learning, little is actually known about how students might feel in a flipped learning class. On the one hand, better preparation (and the better performance resulting from it) may reduce learners' anxiety level. On the other hand, shifting the responsibility for learning to students may be anxiety-inducing. Furthermore, most of the previous studies have focused on the comparison of flipped learning (or a particular type of it) with a conventional method of teaching. Little, if any, research has focused on the comparison of different types of flipped learning affecting EFL learners' classroom anxiety, especially in the online context of SHAD. To address this gap, this study addressed the following research question:

Are there any significant differences among different types of flipped learning (traditional flipping, demonstration-based flipping, double-flipped classroom) and conventional instruction with regard to their effect on foreign language learners' classroom anxiety?

Literature Review

Several aspects of flipped learning have been addressed in the literature. Gok et al. (2021) studied the effect of the flipped instruction on the foreign language reading anxiety (FLRA) as well as foreign language classroom anxiety (FLCA) of a group of pre-service English language teachers. They had two groups (flipped and non-flipped) of first-year English language instructors. The results revealed a significant reduction in the FLRA and FLCA level for the flipped group, whereas the non-flipped group experienced no meaningful change.

Rajabi et al. (2021) looked at how flipped instruction could affect the anxiety and listening ability of Iranian EFL students. Sixty-eight students who were learning English were selected and divided into two groups - one group for a new teaching method and the other as a regular group. Before the treatment began, both groups were tested for how anxious they were in the classroom and on their listening skills in an English test. The comparison group got the lessons and videos on WhatsApp and had to study them before coming to class. The experimental group

listened to the audio files one or two times in the classroom. The next step was giving both groups a test to measure their anxiety in the classroom and their listening skills. Data analysis showed no considerable difference between the anxiety scores of the two groups.

Parvaneh et al (2022) conducted a study to see how the flipped classroom and language skills affect how independent and worried Iranian students feel while learning English. Students from Payame Noor University were divided into two groups: one to try something new and the other to not try anything new. The findings showed that flipped classrooms have a big impact on students' independence and feelings of worry when learning a new language. The research showed that how well someone knows a language does not seem to affect how much they control their own learning or how anxious they feel about using the language. The study further showed that using flipped classrooms has a long-lasting effect on students' nervousness about speaking a new language and their ability to learn independently. The researchers concluded that using the flipped classroom model can work well for teaching English in many places and can have good results.

In another research, Abdullah et al. (2021) tried to see if flipped instruction helps students feel less nervous when speaking English. They used a combination of research methods and collected data using a questionnaire about anxiety in English speaking. The researchers gave out the questionnaire at three different times: before, during, and after the new method was used. More information was gathered from group interviews and students' written reflections. The results showed that EFL learners felt less scared when speaking English after using FCM for twelve weeks. The results of One-way ANOVA showed that EFL learners had different levels of anxiety when speaking English. MANOVA results further suggested significant differences among the four dimensions of AESPQ. All in all, FCM worked well for all the students in this study because it met their needs and matched their way of learning.

Han et al (2022) investigated how FLCA affects doing well in school, and how emotions and classroom environment play a role. The study used a convenient way to collect data from Chinese university students. They used a method called CB-SEM and a software called AMOS to check if the model was good and to test their ideas; they also looked at how well their measurements were correct and reliable. The results showed that FLCA had a bad and strong impact on students' grades. In addition, EIC helped improve the connection between FLCA and doing well in school. The researchers found that being aware of and being able to control their feelings could help students feel less nervous when learning a new language, and also made them better at speaking it. Finally, the classroom setting had a positive and important effect on the connection between FLCA and emotional intelligence in communication.

Previous studies have focused on how feeling nervous affects learning English as a Second Language (Asadzadian & Asadzadian, 2019). In the present study, we wanted to see how flipped learning changes how anxious students feel. Previous studies have found that anxiety can make it harder to learn English.

Anxiety can cause many problems, like disappointment and bad performance. People who are very anxious do not do well in school, they do not learn much, and they get nervous while studying. Reciprocally, students who do not do well in English classes and on tests feel very worried and stressed (Gawi, 2020). To help students feel less stressed, English teachers should make the classroom a nice place to be. Actually, students feel more anxious when their teachers are too serious or strict in the classroom (Razak et al., 2017)

Flipped learning may be a useful way to overcome the above-mentioned problems. An important part of designing a flipped classroom is making sure that students can easily use the technology they are already familiar with (Kim et al., 2017). The Shad platform designed by the Iranian Ministry of Education is an online application through which Iranian teachers can present their video and audio lessons. Students can save or send files like educational videos, audio, and tools. They can also talk to other students and the teacher about the materials. Students can use their computers or mobile phones to go online and see their homework, and do some work at home. Students can review the materials whenever they want and as many times as they need. Teachers can divide each lesson into different parts to facilitate students' understanding of the topics. Before the Covid-19 era, online teaching and flipped instruction were not used much in language teaching and learning in the context of Iran; such classes were mainly face-to-face not online. The outbreak of Covid-19 somehow highlighted the necessity of such online instructional platforms.

The Covid-19 pandemic actually affected education seriously. It forced the conventional physically situated face-to-face systems of education into an unprecedented long period of hibernation all over the world. Due to the requirements of the new situation, teachers needed to change regular classroom practices and adapt themselves to the new ways people learn and socialize. Therefore, classes had to be held online. At the same time, the flipped classroom is when the usual way of teaching is turned around. Instead of learning new information in class, you do it at home by yourself. This means that the relationship between teachers and learners have to undergo further changes.

To summarize, although based on the reviewed literature, flipped learning is a viable alternative to the conventional way of teaching that can open new horizons and herald new opportunities in education by giving teachers higher levels of flexibility, it can also potentially be a source of additional anxiety for learners, thus damaging their long-term learning efficacy. When flipping takes place in an online context, on the one hand, there may be additional levels threat to learners' anxiety level due to the fear of being able to cope with the demands of the online context. Particularly, the Shad application, which was developed for the first time in response to the unprecedented challenge of COVID-19, could augment the anxiety of EFL learners. On the other hand, since the presence of the teacher was no longer a direct threat to learners' anxiety level, flipping the classroom in the online context could be less anxiety-inducing. To resolve this issue, the researchers of this study compared the effect of different types of flipped instruction and conventional instruction on Iranian EFL learners' classroom anxiety.

Method

Participants

The present study was carried out in a high school in Alvand, Qazvin. 120 students studying at the 10th grade took part in this study; they were selected from among 150 10th graders, and they were placed into four groups. The participants were all aged 16 and 17. A placement test confirmed that the level of the students was lower-intermediate. The participants were assigned to four homogeneous groups of 30 students. The participants were from families that could afford providing their children with appropriate equipment such as smart phones and laptops. Since Shad application is an easy-to-use application, there was no problem or limitation regarding their familiarity with using this application.

Materials and Instruments

The main material used in the present study was the course book "Vision I", which is taught as the English book for the $10^{\rm th}$ graders and the book includes four units in which all the four skills and all the components of the English language are included. The topics vary from saving the nature to traveling around the world. The grammatical points also include a variety of structures including the future tense, singular and plural types of nouns, modals, regular and irregular adverbs, etc. The course book includes a student book accompanied by a workbook.

The instruments that were used in the study included a placement test and pretest and posttest of foreign language classroom anxiety (FLCA) in the form of a questionnaire. The placement test was the Oxford Placement Test (OPT) and was used to make sure the participants were homogenous. The validity and reliability of this test have been checked and approved before; still, it was checked again and the reliability index of the test (estimated through the KR-21 formula) turned out to be 0.81. The participants were given 60 minutes to do the placement test. The OPT includes 60 items. The test ranking was as follows and was based on the number of correct answers by the participants: 1-17 beginner, 18-27 elementary, 28-36 lower-intermediate, 37-47 upper-intermediate, 48-55 advanced, 56-60 very advanced.

The questionnaire for foreign language classroom anxiety scale (FLCAS) developed by Horwitz et al. (1986) was given to the participants in all groups before and after the treatment in order to compare the participants' anxiety. The questionnaire dealt with the fear of learning a foreign language in a course, for example, the fear of speaking in front of other students. The questionnaire had one dimension and the number of items was 33. The response format of the questionnaire was a 5-point Likert scale ranging from strongly agree to strongly disagree. The reliability index was reported by the developers to be 0.93. Nevertheless, its reliability was rechecked in the context of the present study, and the index was found to be 0.85. Some items of the questionnaire were negatively worded and in order to make the scoring procedure easier, the scale was reversed for these items based on the questionnaire's instruction.

Procedure

Initially, the participants of the study with the above-mentioned characteristics were selected through convenience sampling based on availability. To check the language proficiency level of the participants, a standardized placement test (OPT) was given to the participants. All the learners were made familiar with how to answer the questions at the beginning of the study, and the researcher explained the aim of the study to them. A placement test (OPT) was used to homogenize the participants, and four groups of 30 students were formed based on the results of the placement test from among the 150 students.

The control group consisted of 30 students aged 16 and 17. The participants in the control group were provided with conventional instruction, and the intended lexical and grammatical items were taught to them through traditional and conventional methods. During each session, the learners in the control group were provided with the explanations and exercises related to each lesson. All of the participants in this group participated in eight sessions of teaching, each lasting for 45 minutes (because of the limitations posed by the Ministry of education). Explaining the contents through giving the meaning of the word and sometimes translating into their mother tongue were the main procedures implemented in this group. What mattered was that there was no flipping in this group. It was a teacher-centered class in which the teacher no only presented almost all of the lesson but also determined what the students should do in the class. At the end of each class, the teacher also assigned some homework for the students to do at home. Therefore, unlike the flipped learning classes, the students learnt in the class and practiced at home.

Like the control group, each of the experimental groups consisted of 30 participants at the same age and level of proficiency. The learners were taught the contents through flipped instruction. The participants in these groups also participated in eight sessions of teaching, each lasting for 45 minutes. The learners watched the files on their personal devices and computers. During the first session, the teacher explained to the learners how to use the files and what to do. There were three different types of flipped learning as the treatment of the study; therefore, three experimental groups were formed.

In the traditional flipping group, to help students prepare themselves for the class, they were asked to watch some short tutorial or explanatory videos before attending the class. The files were provided by the teacher and given to the students through Shad application. The students in this group had to practice these contents in the class and discuss them, and the teacher provided them with appropriate feedback and comments about their performance. In each session of the class, the students practiced the main concepts; to do so, they did some exercises or had a debate with their peers, and the teacher provided them with personalized feedback about their strong and weak points in explaining the lesson. The feedbacks were delivered to the learners face-to-face, using notes or recorded voice through Shad application when time was not enough. The teacher took notes of the points that had to be improved in

order to make the explanation clearer and more understandable. When they left the class, the students were expected to review the things that they had learned in class so that they would expand their knowledge. For example, the first lesson of the 10th grade has two main grammatical structures which include using the modal verb "will" and "to be going to" to talk about the future, and the vocabulary of this lesson are mainly about nature and animals. The teacher corrected their mistakes about the explanation of functions of these two grammatical structures by providing some examples of their own plans for the future.

In the demonstration-based flipping group, it was the process that was the focus of the class. The teacher had recorded videos of himself performing activities in a step-by-step fashion; he provided the students with the files through Shad application. The students studied these files at their convenience; they were expected to practice and follow the teacher's model in class. Like the demo sessions in which new teachers demonstrate their teaching ability, the students came to the class and performed what they had watched and learned through the files. They were expected to perform in ways similar to the teacher. To further improve their learning, the students used tutorial videos and reviewed certain steps as many times as they needed. These video files were also provided by the teacher.

In the double-flipped classroom group, students took the role of their teacher. Here, the students recorded videos of their own teaching to show that they had mastered the new skills provided in their book. They had to teach the contents and record it as a video file and then share it with their classmates through Shad application. After each session, they discussed their performance and, again, the act of showing or teaching how something is done reinforced learning. As the main focus of this study was on teaching grammar and vocabulary, the students in all the three groups of flipped learning had to work on the sections which included grammatical points and new words or expressions which are clearly stated in their course books.

After the treatment period, the students participated in the posttest and filled out the questionnaire carefully. The English version of the questionnaire was administered. The students generally had no problem understanding the main point of the items. Nevertheless, to guarantee that they understood everything, questions were answered during the administration and the unfamiliar parts were translated. Test takers spent around 45 minutes on this task, and they were asked for their active participation in the test. The data collected through the questionnaire were described and submitted to statistical analysis.

Data Analysis

In order to answer the research questions, the data were analyzed by means of the statistical package SPSS 26. To address the questions of the study, ANCOVA was used to compare the postest scores of the learners of the four groups after removing the possible effect of the preexisting differences.

Results

This study sought to see if there are any significant differences among the effects of traditional flipping, demonstration-based flipping, double-flipped classroom and conventional instruction on students' foreign language learning classroom anxiety level. Analysis of Covariance was used to answer this research question.

Before conducting ANCOVA, the distribution of the scores was checked for normality in all the groups, and the significance level the Kolmogorov-Smirnov test was above .05, showing no abnormality in the distribution of scores. The assumptions of ANCOVA were also checked: the treatment had no effects on covariate measurement since the measurement was done prior to the treatment. The covariate was reliable and no strong correlations were observed among covariates because there was only one covariate in the analysis. The relationship between dependent variable and the covariate was linear and homogeneity of regression slopes was assured.

Given the index of Cronbach's Alpha (r = .85), the measurement of the covariate was reliable. The linearity assumption assuming that the relationship between the covariate and the dependent variable should be linear was examined in Figure 4.3, which showed that the four lines are straight, suggesting that the requirement linearity of the relationship is met.

Figure 1
Scatter Plot of Pretest and Posttest of Anxiety Level

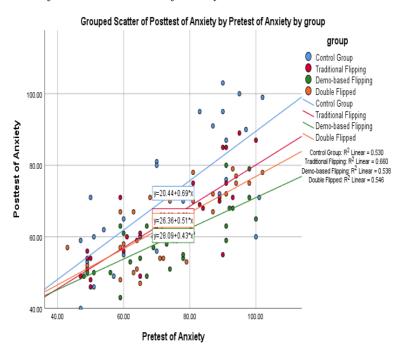


Table 1 tells us that the level of significance in Levene's test (.21) is above the selected significant level (.05); therefore, the homogeneity of variance assumption was not violated for anxiety level scores in the groups.

Table 1Levene's Test Result for Anxiety Level Scores by Group

| | Levene Statistic | df1 | df2 | Sig. |
|---------------|------------------|-----|-----|------|
| Based on Mean | 1.522 | 3 | 116 | .212 |

Table 2 below shows that the significance level of the interaction between group and the pretest of anxiety level (group * anxietypre) is above .05 (F $_{(3, 112)}$ = 1.41, p = .24) and not statistically significant; therefore, no interaction was found, and the pretest and posttest scores of anxiety level in all the groups enjoyed the assumption of homogeneity of regression slopes.

Table 2

Homogeneity of Regression Slopes for Anxiety Level

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|------------------------|----------------------------|-----|----------------|--------|------|------------------------|
| Corrected Model | 12354.786 ^a | 7 | 1764.96 | 24.80 | .000 | .60 |
| Intercept | 3166.626 | 1 | 3166.62 | 44.49 | .000 | .28 |
| Group | 51.264 | 3 | 17.08 | .24 | .868 | .00 |
| Anxietypre | 9159.548 | 1 | 9159.54 | 128.70 | .000 | .53 |
| Group* Anxietypre | 302.295 | 3 | 100.76 | 1.41 | .242 | .03 |
| Error | 7970.806 | 112 | 71.16 | | | |
| Total | 522527.000 | 120 | | | | |
| Corrected Total | 20325.592 | 119 | | | | |

a. R Squared = .608 (Adjusted R Squared = .583)

ANCOVA was used after making sure that the assumptions were met. Before presenting the results of ANCOVA, descriptive statistics for the scores in the groups were summarized in Table 3. The table shows that the mean scores of anxiety level in the control group (M = 73.57, SD = 18.34), traditional flipping group (M = 72.23, SD = 16.96), demonstration-based flipping group (M = 73.87, SD = 15.17), and double flipped group (M = 73.83, SD = 14.80) are close to each other on the pretest. On the other hand, the mean scores on the posttest of anxiety level are as

follows: control group (M = 71.27, SD = 17.41), traditional flipping group (M = 64.07, SD = 12.05), demonstration-based flipping group (M = 59.77, SD = 8.86), and double flipped group (M = 63.67, SD = 10.12).

Table 3Descriptive Statistics of Anxiety Level Scores on Pretest and Posttest

| | N | Mean | SE | SD |
|------------------------------------------|----|-------|------|-------|
| Pretest of Control Group | 30 | 73.57 | 3.34 | 18.34 |
| Posttest of Control Group | 30 | 71.27 | 3.17 | 17.41 |
| Pretest of Traditional Flipping Group | 30 | 72.23 | 3.09 | 16.96 |
| Posttest of Traditional Flipping Group | 30 | 64.07 | 2.20 | 12.05 |
| Pretest of Demonstration-Based Flipping | 30 | 73.87 | 2.77 | 15.17 |
| Posttest of Demonstration-Based Flipping | 30 | 59.77 | 1.61 | 8.86 |
| Pretest of Double Flipped Group | 30 | 73.83 | 2.70 | 14.80 |
| Posttest of Double Flipped Group | 30 | 63.67 | 1.84 | 10.12 |
| | | | | |

The results of the ANCOVA are summarized in Table 4. After adjusting for the anxiety level scores on the pretest, significant differences were found among the mean scores of the groups on the posttest (F $_{(3,\ 115)}=9.80,\ p>.005$, partial eta squared = .20). According to these statistics, significant differences were observed among the effects of three types of flipped learning and conventional instruction on foreign language learning classroom anxiety level.

Table 4

Tests of Between-Subjects Effects on Anxiety Level

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|-----------------|----------------------------|-----|----------------|--------|------|------------------------|
| Corrected Model | 12052.49 ^a | 4 | 3013.12 | 41.88 | .000 | .59 |
| Intercept | 2953.97 | 1 | 2953.97 | 41.06 | .000 | .26 |
| Anxietypre | 9984.66 | 1 | 9984.66 | 138.79 | .000 | .54 |
| Group | 2116.13 | 3 | 705.37 | 9.80 | .000 | .20 |
| Error | 8273.10 | 115 | 71.94 | | | |
| Total | 522527.00 | 120 | | | | |
| Corrected Total | 20325.59 | 119 | | | | |

a. R Squared = .593 (Adjusted R Squared = .579)

To determine the location of the significant differences among the mean scores of anxiety level of the four groups, pairwise comparisons were made. Table 5 shows the pairwise comparisons. The table shows a statistically significant difference (p < .05) between the control and the traditional flipping groups with a mean difference of 6.44 in favor of the control group. It should be noted that a lower score in anxiety level shows the better effect of instruction.

The results also showed a statistically significant difference in the anxiety level mean scores between the control and the demonstration-based flipping groups in favor of the control group. Furthermore, pairwise comparisons showed a statistically significant difference between the control group and the double flipped group in favor of the control group.

However, there was no statistically significant difference between the mean scores of traditional flipping and the demonstration-based groups (p > .05), between the mean scores of the traditional and the double flipped groups, and between the demonstration-based and the double flipped groups.

Table 5Pairwise Comparisons for Anxiety Level Scores

| (I) Group | (J) Group | Mean Difference (I-J) | SE | Sig.b |
|----------------------|----------------------|-----------------------|------|-------|
| Control Group | Traditional Flipping | 6.44* | 2.19 | .024 |
| | Demo-Based Flipping | 11.67* | 2.19 | .000 |
| | Double Flipped | 7.75* | 2.19 | .003 |
| Traditional Flipping | Demo-Based Flipping | 5.22 | 2.19 | .112 |
| | Double Flipped | 1.30 | 2.19 | 1.000 |
| Demo-Based Flipping | Double Flipped | -3.91 | 2.19 | .457 |

Based on estimated marginal means

Discussion

The main purpose of this study was to investigate the effect of three types of flipped learning including traditional flipping, demonstration-based flipping, and double flipped instruction on foreign language learning classroom anxiety level of EFL learners at lower-intermediate level.

Regarding the learners' anxiety level, it was observed that the three types of flipped instruction used in the present study were more effective on reducing learners' anxiety level compared to conventional instruction. These results are in line with the findings of the studies done by Gok et al. (2021) and Abdullah et al.

^{*.} The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni

(2021), who came to the conclusion that flipped instruction positively affects EFL learners' anxiety level and helps them reduce their level of anxiety while attending language learning classroom. On the contrary, Rajabi et al. (2021) came to the conclusion that flipped instruction has no positive effects on reducing EFL learners' anxiety level. In the context of the present study, however, the three types of flipped learning were almost equally effective on reducing the anxiety level of the learners. There has not been any study focusing on comparing the effectiveness of different types of flipped instruction in reducing EFL learners' anxiety level; however, it can be discussed that generally, flipped instruction reduces the authority of the teacher in the classroom compared to conventional instructions and allows the students to be more responsible for their learning process. At the same time, it needs to be acknowledged that this study was a quantitative study which compared the anxiety level of the participants and showed significant differences. However, it cannot be claimed that reduction in the anxiety level of the participants was necessarily due to the reduced authority of the teacher. Since a large number of factors may actually contribute to students' classroom anxiety, probably qualitative studies are needed to shed more light on how flipped classes, especially those in the online environment, affect EFL learners' anxiety.

Nevertheless, since all the three types of flipped instruction were shown to be better than conventional method, regardless of the type of flipped learning, it can be generally discussed that we might have to move towards the approaches and methods which are more student-centered and, therefore, more responsibility should be given to learners in language learning classes.

As to the effects of flipped instruction on students' anxiety, this study suggested that flipped learning generally reduces students' anxiety level. At the beginning, the present researchers expected the learners in the double flipped group to be more anxious compared to the other groups because the responsibility of both preparing the video files and presenting them in the classroom was shifted to them. However, after the intervention period, it turned out that this type of flipped instruction also helped the learners reduce their anxiety level.

The findings of this study about using technology for educational purposes in the classroom (in the flipped learning groups) aligns with Dinçer and Polat's (2022) assertion that it can improve students' comfort and ease of learning. This gives the teacher more time to talk with students instead of just lecturing. Flipped classrooms let students learn in different ways and places. They can work in groups, study on their own, do research, perform tasks, and get feedback. In a flipped classroom, the teacher helps students learn by watching them closely, offering different ways to learn and show what they know, and letting them take an active part in learning. The teacher also makes sure everyone can join in and gives feedback as they go along.

Flipped instruction might be better than regular teaching because students who learn this way use other educational resources outside of class, so they come to

class more prepared and can focus on more advanced thinking tasks instead of just learning grammar and vocabulary (Dinçer & Polat, 2022). Based on Bloom's theory, students understand what they learned before class and do simpler thinking tasks like understanding and remembering. This gives them more time to really understand the material before they come to class. When a classroom is flipped, students can study before the class and participate more during the class, leading to better learning. Nevertheless, we would like to acknowledge that the picture may not be this simple. In actual fact, there may be a wide variety of factors contributing to EFL learners' anxiety level. The complex multi-dimensional nature of human learners suggests that there must be much more intricate relationships among a variety of variables. For the sake of manageability, however, this study focused on the mentioned variables.

Conclusion and Implications

Flipped instruction helps EFL learners to preview and study the lessons in advance and at their own pace. Flipped instruction helps learners by giving them more freedom in their schedule and assignments. They can learn anywhere and at any time.

From the findings of the study, it may be concluded that teachers can expand and deliver the learning experience outside the limited space and time of classroom environment. It allows both teachers and learners to save their time for more critical issues to be discussed and practiced during the class time. One of the strengths of this study is that it tried to use the Shad application to change how English lessons are taught. Some teachers did not think this app was helpful for teaching, but the study showed that it did make students enjoy learning and participate more.

On the basis of the findings of this study, it may be concluded that there is no superiority for any of the types of flipped learning, and there is no reason to choose and resort to a specific type. Since the participants benefited equally from all types, according to the context of teaching, population, classroom environment and equipment, learners' level of proficiency, etc., teachers can choose any type of flipped instructions.

Flipped learning generally helps language learners benefit more from their own capabilities of preparing materials and teaching them. Although some teachers believe that flipped learning removes a large amount of their authority from the classrooms and might negatively affect their face, the findings could be convincing enough to persuade them to use this interesting technique in their classes, too. One of the principles of flipped learning is to remove or reduce the authority of teachers in the learning environments. When students experience the authority themselves and have an active role in controlling the materials and what happens during a class session, their anxiety level is reduced (Parvaneh et al., 2022). Accordingly, it can be

concluded that the significant reduction in the learners' anxiety level in flipped classes is due to their active participation in and taking responsibility of their own learning process.

In the present era, known as the digital age, teaching and learning are seen as complicated processes that require the use of videos and technology. Using technology to help learners learn a language can make it easier for them to learn and do well. Using technology in the classroom can help students learn languages better. It can make students more independent learners, give them more chances to use English, and make them better at speaking and understanding English. Therefore, it can be said that using technology to flip the classroom can help students learn a new language. Additionally, technology makes it easier for students to learn from far away. This way of learning has the advantage of being easy to access and adjust to different needs. When you have access to the internet, you can use flipped classroom whenever and wherever you want. In conclusion, using flipped learning helps students get more involved in their learning and become more independent.

While it is acknowledged that caution should be taken when drawing implications from a single study, there may be certain pedagogical implications for the following stakeholders.

The findings of this study are expected to be valuable to EFL teachers regardless of their experience and teacher trainers in various ways. Novice EFL teachers have often an incomplete image of how teaching takes place in language classes and what they practice is based on what they are told to do in classrooms by either the institutes or universities. Keeping them well-informed of up-to-date theoretical and practical issues about the ways of implementing new technologies and methods can be enlightening for language teachers and language educational systems. However, teachers should be careful not to completely shift their responsibility to their students since they might not be able to handle a class and its circumstances. In these situations, classrooms may run out of control or become difficult to manage, and some students might think that their teacher is not responsible enough.

Moreover, not paying much attention to students' capabilities in our classrooms may result in their marginalization and making them passive learners who do not dare to take new responsibilities. This study reminds us that teachers should take advantage of student-centered methods as they provide learners with more opportunities to prove themselves. The current study approves that the application of somehow entertaining techniques by EFL instructors in order to reduce the learners' anxiety draws their attention to the learning process more and more. The current researchers advise teachers to feel confident with the rules and procedures of flipped instruction.

The results of this study can also be helpful for teacher training courses. Teacher trainers, especially in our universities, introduce some outdated language

teaching ideologies, insights, and methods to their trainees. Teacher trainers should be aware of instructing appropriate practices such as using new technologies and techniques to make classes more active and lively.

Syllabus and curriculum designers may also use the results of this study to make new materials and lesson plans that are less stressful for students. The flipped classroom changes how students learn by using technology to help them understand the material better. Using advanced thinking skills and making sure teachers and students talk a lot helps learning to become more meaningful and effective.

The flipped classroom model is a new way of teaching that has the potential to change how students learn. It has encouraged EFL learners to study grammar and vocabulary, and has also helped them to improve their grammar skills and vocabulary knowledge. It has also encouraged them to work together during class, by giving them more time to do activities together. This study adds to the existing body of research by showing how the flipped learning model can be used for teaching grammar and vocabulary in English as a foreign language classes.

In a nutshell, the findings of this study can be beneficial for all those who are involved in any educational context. When technology is used for preparing and delivering materials, the teacher has more time to focus on problems and difficulties, which will result in enhancing the learning outcomes, autonomous learning, motivating learners, and more opportunities for practice. Innovative strategies such as flipped instruction can help EFL materials developers design materials which are more personalized addressing the needs of any individual with diverse learning styles and preferences. Technologies can help them prepare new multimodal materials and make contents more interesting for different types of learners.

Despite the above-mentioned points, there were a number of limitations as well. The study was conducted with 120 10th-grade students from a single high school in Iran, which may limit the generalizability of the findings. A larger and more diverse sample size from multiple schools or regions could enhance the external validity of the study. Moreover, participants were selected based on lower-intermediate proficiency levels, which may not capture the full range of EFL learners' anxiety experiences. Including participants with varying proficiency levels could provide a more comprehensive understanding of how flipped instruction impacts anxiety across different learner groups. Due to the limitations and delimitations of the study including sample size, duration of the treatment, the context of experiment, etc., it is suggested that more studies be conducted in this area so that more solid and generalizable results are obtained.

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