The Flip Side of Language Learning: Student Perceptions and Achievement in Iranian EFL Classrooms

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ABSTRACT

In the postmodern era, considering the new technological facilities, researchers are trying to improve the traditional learning process by presenting new learning models. One of these models, called blended learning, tries to presents specific ways and solutions to blend synchronous and asynchronous learning. The flipped classroom, a subcategory of this model, reverses the traditional classroom format. This study investigates the role of this model in EFL learners' perceptions of class activities and their language achievement. To do so, two 10th-grade high school classes were selected as the participants. In the experimental group, the flipped learning approach was implemented through creative software developed by the researchers. The software was designed based on the book that students were supposed to study that semester. The software framework was Storyline which is a suitable program for creating interactive courses. Learners' perceptions were also measured using the translated version of the 'Students Perceptions of Classroom Activities' scale. The results revealed that the flipped learning approach could account for over 70 percent of Choice perception, about 50 percent for Challenge, and 10 percent for Joy perception. The results also demonstrated a significant impact of flipped learning on language achievement. The results of this study may help instructors and practitioners to use technology in their teaching program and be optimistic about its significant results on their learners' outcomes.

KEYWORDS: blended learning, challenge, choice, flipped learning, interest, joy, language achievement

1. Introduction

Technology has affected many aspects of people's lifestyles, and learning is no exception. One of the new methods of learning that has emerged recently is the flipped learning model, one of the subcategories of blended learning, presented by two chemistry teachers trying to provide their absent students with the materials taught in the class. They started recording their classes and sending them to their absent students via the internet. Not only were absent students satisfied with this innovative work, but also the other students were interested in receiving these materials (Chao, 2015). This was the starting point of the flipped learning model, and then it matured through time. Bergman and Sams (2012) described the flipped learning model as a type of blended learning that maximizes the value of in-class time.

Due to some drawbacks of traditional learning, educational scholars are trying to improve educational systems throughout the world (Jahedizadeh, 2025). They know that teacher-centered classrooms based on lecturing make students passive

in the classroom (Doman & Webb, 2017) which can result in the reduction of concentration and engagement (Ghanizadeh, 2022). Another noticeable point is that in traditional classes, the knowledge is presented once by the teacher and disseminating and presenting lessons happens only in the classroom (Gandomkar, 2025). In particular, during learning a new language, homework needs to be done under some guidance, but often parents cannot help their children with that, as it may exceed their knowledge (Marlowe, 2012), causing students stress before going to the classroom.

Technology can be a useful tool for improving education if it is used purposefully to reach specific goals. To solve these problems, some new methods like blended learning have emerged. In EFL/ESL contexts, flipped learning makes students more engaged and responsive (Doman & Webb, 2017). Especially in non-native countries, students are not exposed to the new language outside the classroom and by flipping lessons they can access them whenever and wherever they want, in this way flipping extends the boundaries of the classroom (Doman & Webb, 2017).

Blended learning models incorporate technology as a vital part of achieving the educational targets. This approach, as its name suggests, "blends" synchronous and asynchronous learning (Sota, 2016). It has been defined by Innosight Institute as a formal program in which students learn in part through online/offline teaching and can choose the time, place, and pace of instruction (Staker & Horn, 2012). Among various models of blended learning, flipped approach can boost the value of in-class time (Bergman & Sams, 2012; Wei, 2025).

The main obstacle in implementing the flipped approach is access to suitable and pertinent online and electronic materials (Doman & Webb, 2017). This study is an attempt to address this gap by designing an online course and exploring the effect of flipped learning on the Iranian high school learners' perceptions of classroom activities and language learning.

The importance of this inquiry can be considered in two aspects: first, flipped learning is a new method in the world, and its advantages and disadvantages on different educational systems and language learners should be examined more thoroughly to optimize using this method in the process of language teaching. Second, the findings on the concept of flipped learning are mainly from western countries in ESL contexts, so the effect of this approach on Iranian learners can be of great value. The results of this research will help teachers to find out more about flipped learning and its effect on Iranian learners. Hence, they will be able to make the best decisions about their teaching approach.

In other words, the integration of flipped learning in language education represents a transformative shift from traditional pedagogical approaches, leveraging technology to enhance student engagement, autonomy, and academic performance (Bergmann & Sams, 2012). This study holds substantial academic significance for several reasons:

1. Advancing pedagogical innovation in language education: Flipped learning challenges conventional teacher-centered models by restructuring classroom dynamics, allowing students to engage with instructional content (e.g., videos, readings) before class and dedicating in-class time to interactive, communicative activities. Investigating its effectiveness in language learning contributes to the growing body of research on blended and technology-enhanced learning, offering empirical evidence on how such models can optimize second language acquisition (Basal, 2015).

2. Enhancing student achievement and language proficiency: Prior studies suggest that flipped learning can improve academic outcomes by providing learners with opportunities for self-paced learning and reinforcement through practice (Bergmann & Sams, 2012). However, its impact on specific language skills remains underexplored. This study aims to provide data-driven insights into whether flipped instruction leads to measurable gains in language proficiency, filling a critical gap in SLA research.

3. Contributing to theoretical frameworks in language learning: This study aligns with constructivist and sociocultural theories of learning, which emphasize active participation and social interaction in knowledge construction (Vygotsky, 1978). By analyzing how flipped classrooms facilitate peer collaboration and teacher feedback, this research seeks to strengthen theoretical models of technology-mediated language learning.

4. Informing policy and instructional design: As educational institutions increasingly adopt digital learning strategies, empirical evidence on the efficacy of flipped learning can inform policy decisions and teacher training programs. The findings may support the integration of blended learning models in language curricula, particularly in contexts that prioritize student-centered, interactive learning.

5. Developing a custom software for flipped learning in language classes: This study introduces a novel and significant contribution to the field of language education by designing and implementing a specialized software tool tailored to flipped learning. While previous research has explored flipped classrooms using generic platforms, this study advances the field by developing a purpose-built, innovative application that optimizes the flipped learning experience for language acquisition.

Hence, this research goes beyond conventional flipped learning studies by not just applying the method but engineering a specialized technological framework to maximize its benefits for language education. The development of this software ensures that the flipped model is implemented in the most pedagogically sound and technologically efficient way, providing new insights into how custom technological tools can enhance language learning.

This innovation makes the study a pioneering contribution to both language teaching methodologies and educational technology research, opening new avenues for future developments in AI-driven, adaptive, and interactive language learning systems.

This study holds significant academic value by contributing to pedagogical innovation, language acquisition theory, and instructional design. By evaluating both student achievement and perceptions, it could contribute to a more holistic understanding of flipped learning's role in language education, ultimately supporting more effective, learner-centered teaching practices.

Besides, this study examined the probable effects of flipped learning on high school English language learners. Conducting this study with high school students was motivated by key educational, cognitive, and practical considerations. First, high school students often struggle with passive learning in which the teacher gives lectures. Flipped learning—where students review materials at home and engage in discussions, problem-solving, and projects in class—promotes active learning, increasing motivation and participation. Second, high school students have varying comprehension speeds. Flipped learning allows them to pause, rewind, or rewatch instructional content at home, while class time is used for personalized teacher support, benefiting both struggling and advanced learners. Third, high school is a critical time for fostering independent learning before college. Flipped classrooms encourage students to take responsibility for their learning, improving time management and metacognitive skills. Finally, today's high school students are digital natives. Investigating flipped learning assesses how well educational technology enhances (or hinders) learning.

Conducting such research would provide evidence-based insights for educators, policymakers, and curriculum designers to optimize high school education.

2. Literature Review

2.1. Blended Learning

In the postmodern era, there are three types of classroom format: traditional face-to-face, virtual, and blended (Slomanson, 2014). Virtual learning, which is also called online learning, has been defined as an education in which learners receive content and instruction primarily via the internet (Watson, 2005). Blended learning is thus the result of blending traditional and online learning (Sota, 2016). This approach emphasizes delivering content and instruction, entirely or partly, through the internet and in a location away from home.

There are two prominent taxonomies for classifying blended learning, one with four and the other with six main models, and this study focuses on the former. These models are rotation, flex, self-blended, and enriched-virtual. The flipped classroom model is one of the rotation model sub-models or categories in which students have fixed schedules, and according to that rotate between two phases: face-to-face teacher instruction during a standard day at school, and online delivery of instruction and content of the same subject from home. In this model, students have the flexibility of determining the time, place, and method of receiving content (Staker & Horn, 2012).

2.2. Flipped Learning

Flipped learning is a specific model within the broader framework of blended learning. While all flipped classrooms use blended learning, not all blended learning follows the flipped approach. At the core of this model lies the FLIP framework, where the amalgamation of these four letters forms an acronym, with each letter representing a key concept: F for a flexible environment, L for a learner-centered culture, I for intentional content, and P for the professional educator (Alzahrani & Alqurashi, 2023; Han, 2022). In this model of learning, students receive instruction before class and engage in activities and application exercises during class. Pre-class, in-class, and after-class learning are three phases in flipped learning determined by the teacher based on learning outcomes (Unal & Unal, 2017).

As pre-class activities, students can watch videos and receive instruction for the upcoming session, and complete online exercises. Reading text materials such as books or teacher-provided notes as well as participating in online discussions are some additional pre-class activities. In-class activities can start with a short lecture or a brief content review by the teacher to help students recall the materials. Then, group learning activities take up most of the class time by encouraging students to use and apply the knowledge they acquired from the pre-class materials. Student presentations and taking quizzes are some additional in-class activities (Unal & Unal, 2017). Student self-evaluation or reflection, as a way of engagement in one's thinking (Ghanizadeh & Jahedizadeh, 2025) are some after-class activities, even though they might not be common in the flipped classroom model (Bhagat, 2016; Clark, 2015; Unal & Unal, 2017).

In a flipped classroom, students' needs are emphasized and the class time can be allocated to their weaknesses rather than instructions that can be easily learned at home (Dariyemez, 2023). Activities students normally do outside the class, known as homework, are rescheduled and restructured to be done during face-to-face class time in the flipped learning model (Mehring & Leis, 2018). The responsibilities and roles of students and teachers are affected by this important switch which enhances the quality of learning experiences (Mehring & Leis, 2018).

By flipping the instructional sequence, learners first study the material before class, and then during the class, they collaborate with the teacher and other students. In this situation, the teacher can provide immediate, corrective feedback to the class. In an EFL context, this approach can foster communicative interactions. The flipped EFL classroom is organized around interaction as a core learning strategy and helps students think through answers and devote time to developing their ideas (Mehring & Leis, 2018).

The feedback students receive, from their instructor and their classmates, gives them the opportunity to examine and reflect upon their learning and growth. The flipped learning model maximizes student-centeredness and minimizes teacher-talk time in the class and focuses on scaffolding   the instruction before class via pre-class assignments. The flipped learning model creates a classroom environment for more active learning exercises and in EFL classes, it can result in a communicative learning environment.

Unal and Unal (2017) conducted a study on flipped learning and compared three concepts of students' performance, perceptions, and teacher satisfaction in a traditional and a flipped classroom. In their study, 16 public school teachers were asked to implement the flipped learning model. The results revealed an increase in active learning and problem solving in the flipped classroom due to students having learned the content before class. Other studies have also found positive results of flipped learning on student outcomes (e.g., Ay & Dağhan, 2023; Bhagat, 2016; Chao, 2015; Fisher, 2024; Gasparic, 2024; Jantakoon, 2025; Lo & Hew, 2017; Novianti, 2025).

Other studies have been conducted in Iran (e.g., Fardin et al., 2022; Shooli, 2022; Yousofi & Bashiri, 2023). Alibeigloo (2021), for instance, found that flipped approach positively affects students' use of speech acts. Studies have also explored the role of the flipped classroom in Iranian EFL students' writing ability (Li, 2022; Tahmasbi & RabaniEbrahimiPour, 2023), speaking (Lin & Mubarok, 2021), confidence (Nourinezhad, 2022). Finally, Rezaeyan (2025) aimed to explore the effect of flipped method on students' language skills and self-regulation in an Iranian context. Using a mixed methods approach, the researchers found the positive impact of flipping on students' speaking, listening, and self-regulation (Rezaeyan, 2025).

2.3. Student Perceptions of Classroom Activities

Perception is defined as the process in which individuals receive and interpret information from the environment (Jahedizadeh, 2016). Choice, interest, joy, and challenge are four dimensions of student perceptions of classroom activities (Gentry, 2002) that are identified as significant indicators of academic achievement (e.g., Ghanizadeh & Jahedizadeh, 2015). Jahedizadeh (2015), found that a supportive environment improves the students' motivations and an obstructive environment erodes their motivations.

Gentry (2002) believe that practitioners and scholars can examine schools and classrooms from the students' perspectives and understand how learners view their classroom activities, curriculum, instruction, and schools. Then learners' points of view can be considered and utilized in improving English learning courses as well as designing new ones. They also argue that this kind of evaluation, i.e., classroom activities evaluation from students' view, is not common in educational research and the result of such studies would help educators and practitioners understand what learners perceive and use that understanding to make appropriate instructional interventions.

Research has been conducted to examine the relationship between student perceptions and cognitive strategy use, the subject area, teachers' behavior and involvement (Hardré & Sullivan, 2008; Lee, 2009), as well as gender and grade-level (e.g., Gentry et al., 2002).

Students' perceptions might play a pivotal role in the success of flipped learning, as they influence engagement, motivation, and ultimately, learning outcomes. Flipped learning requires students to take responsibility for pre-class learning, and positive perceptions can lead to higher compliance with pre-class tasks and active participation in class. Also, student attitudes toward flipped learning affect their intrinsic motivation (Lo & Hew, 2017). Moreover, students' perceptions shape how they collaborate during class. Students who view in-class activities as valuable tend to participate more actively (Chen, 2018). Thus, studying perceptions is essential to optimize flipped learning and ensure it benefits all learners.

This study aims to answer the following research questions:

1. Does flipped learning influence EFL learners' perceptions of classroom activities?

    1.1. Does flipped learning influence EFL learners' perceptions of joy?

    1.2. Does flipped learning influence EFL learners' perceptions of interest?

    1.3. Does flipped learning influence EFL learners' perceptions of challenge?

    1.4. Does flipped learning influence EFL learners' perceptions of choice?

2. Does flipped learning influence EFL learners' language achievement?

3. Methodology

3.1. Participants

This inquiry was conducted in two classes of a school in Mashhad, the capital of Khorasan Razavi Province, Iran, selected based on convenience sampling. One of these classes was the experimental group consisting of 18 students, and the other was the control group, including 18 students. Both classes were males at the same proficiency level and the same semester in their educational program. They were in the 10th grade of high school in the Iranian educational system. They were supposed to study two lessons from their textbook, *Vision*, in the first semester of the year.

3.2. Instruments

Students' perceptions and their language proficiency were assessed via using two instruments.

3.2.1.The Babel English Language Placement Test

To evaluate learners' language achievement, the Babel English Language Placement Test was utilized. It is a valid and reliable test with four forms of equal difficulty. The test measures reading, grammar, and vocabulary knowledge. The version used in this study included 25 items and took approximately 20 minutes to complete.

3.2.2.Students' Perceptions of Classroom Activities

For assessing students' perceptions of classroom activities, the translated version of the scale designed and validated by Gentry and Gable (2001) was used. It was translated into Persian and validated by Ghanizadeh and Jahedizadeh (2015). The Cronbach's alpha coefficients for the subscales ranged from .71 to .80 (Interest = .86, Challenge = .73, Choice = .71, Joy = .79). The instrument consists of 31 items evaluating four dimensions of perception (interest, challenge, choice, and joy).

3.3. Procedure

To ensure participants' homogeneity in terms of proficiency and perceptions, the Babel English Language Placement Test and the perception questionnaire were administered to all students as a pretest. The experimental group was taught using the flipped learning model, in which they received audiovisual instruction at home, before coming to class. The control group was taught in a non-flipped learning approach—specifically, traditional instruction with no technology or multimedia resources. The students were all taught from the textbook itself inside the classroom. They were then required to complete homework at home.

The instructional materials for the flipped class included videos, pieces of music, PowerPoint presentations, and other audiovisual materials that the researchers designed according to the book and provided to the teacher as a software application which students could run on their computers. The software was designed based on the book that students were required to study that semester in three months and about 20 sessions (90 minutes each). Students should study two lessons of the book during the semester and the designed materials covered all parts of these two lessons. The software framework selected to design and implement the lessons was Storyline which is suitable software for creating interactive courses.

Articulate Storyline is leading software used by instructional designers, educators, and corporate trainers to create interactive, engaging, and visually appealing e-learning courses. It combines user-friendly design tools with advanced functionality, allowing users to develop content ranging from simple slideshows to complex, gamified learning experiences—without needing to code. Educators can use it to create dynamic content—such as quizzes that adapt based on user input—and engage learners through hands-on interactions.

As can be seen in Figure 1, each lesson started with this picture, and students could launch the software by clicking the START button.
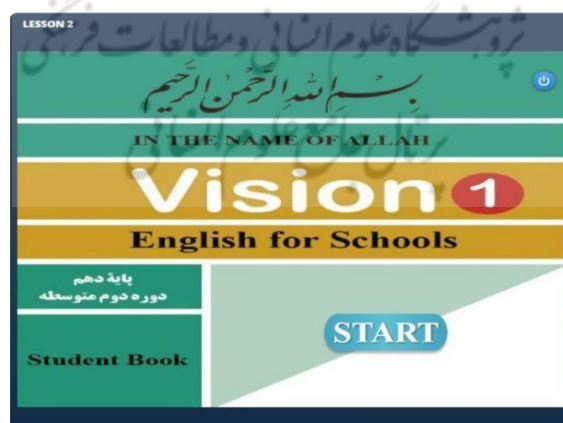
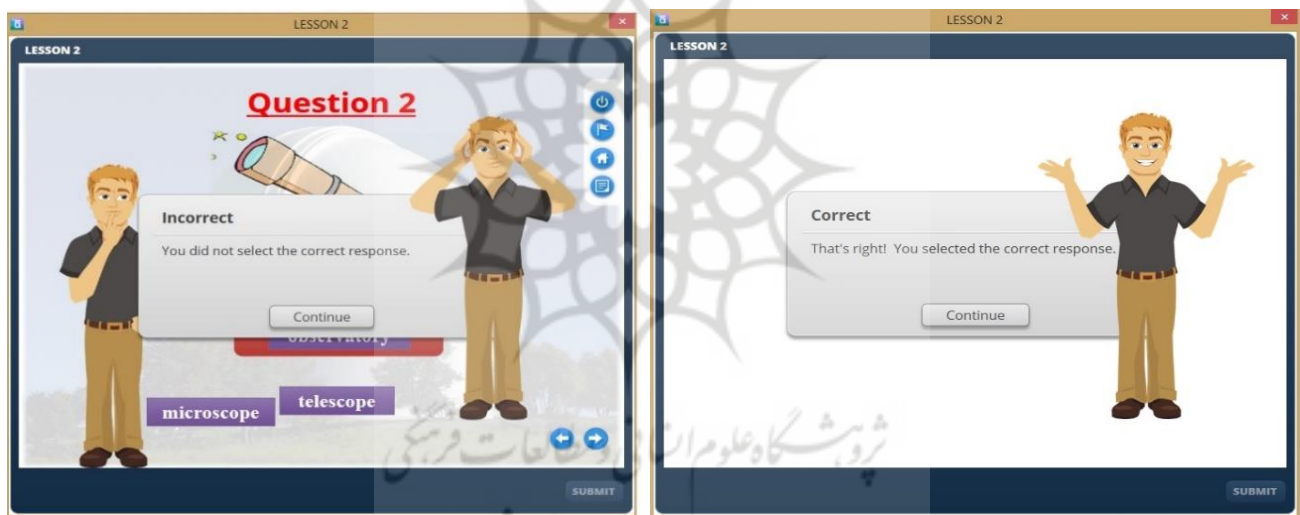
Figure 1.

The Starting Page of the Software

Each lesson in the book has different parts all of which are presented in Figure 2. Learners could select each part of the lesson they wished to work on by clicking on that section.

Figure 2.

The Content List of Lesson Two

In the Get Ready part, which serves as the warm-up, the pictures of the book were extracted and the related vocabulary was pronounced. In other words, students associated the sound, picture, and spelling, and they could play this part as many times as they needed to become familiar with the pronunciation and spelling at their own pace. At the end of this part, there were some questions that learners were required to answer. They received immediate feedback in the software by answering each question. Figure 3 shows the correct and incorrect feedback.

Figure 3.

The Correct and Incorrect Feedback in the Get Ready Part

After receiving the feedback, students could proceed by clicking the Continue button. They had only one attempt to answer the questions and if they wished to review a question, they needed to return to the beginning of the section. They could go to the next part entitled *"conversation"*. This section had been prerecorded and was played while students viewed the images of two persons who were talking together and an image related to the conversation topic was set as the background. Figure 4 illustrates this section.
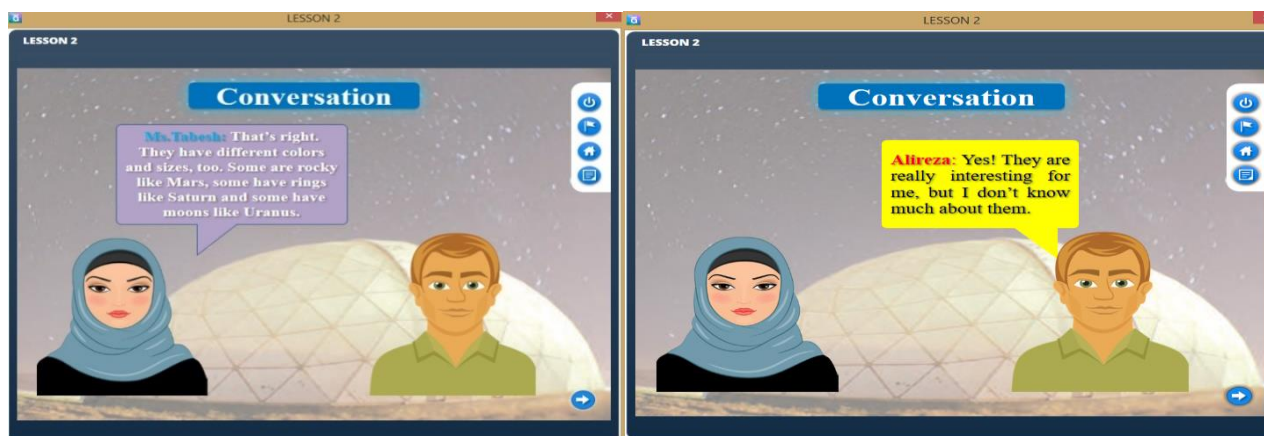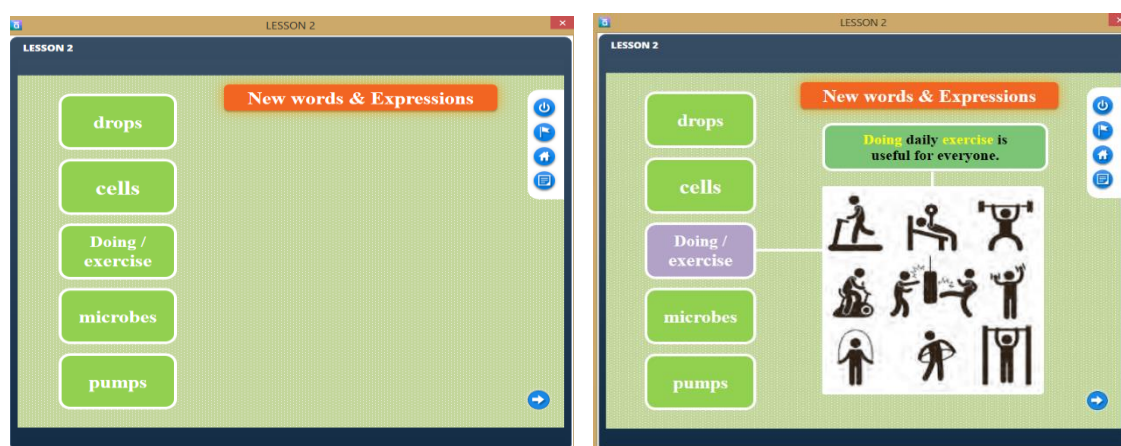
Figure 4.

The Conversation Parts

The conversation part ended with some questions and students were required to answer them interactively. Figure 5 shows two examples of this kind of question.

Figure 5.

*The Conversation Questions in an Interactive Mode*

The next section, "New Words and Expressions," introduced students to new words of the lesson by clicking on each word, shown in Figure 6. Clicking a word in the left column displayed a corresponding image along with a sample sentence and audio playback read the sentence aloud. The section continued with illustrative examples and concluded with interactive questions.

Figure 6.

An Example of the New Words and Expressions Section

After answering the questions at the end of this part, a video file was played to provide some more information about the lesson topic. Next, the Reading section was presented (Figure 7). This section began with the reading passage of the lesson and an audio narration reading the text aloud.
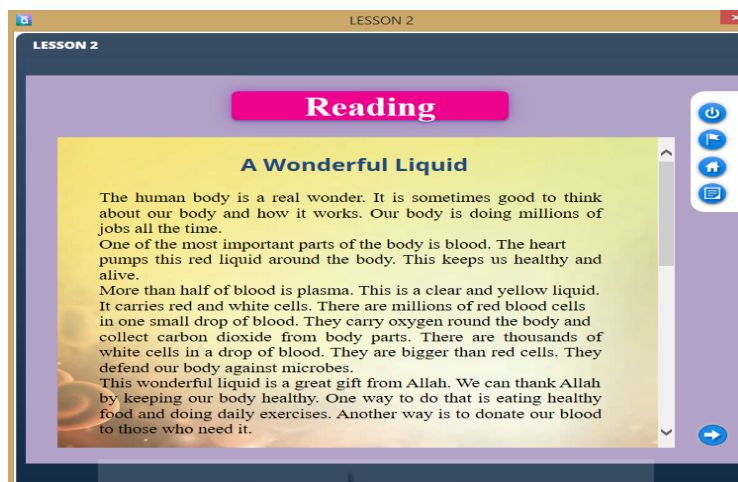
Figure 7.

The Reading Section

Depending on the lesson topic, one or two videos were included to facilitate text comprehension. This part, like the previous parts, ended with some interactive questions to provide feedback to students. Figure 8 shows an example of such questions.

Figure 8.

An Example of Interactive Reading Questions

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The Grammar part began with a short video explaining the grammar topic in each lesson and then some examples were presented. At the end of this part, four questions were provided to allow students to self-assess (Figure 9).
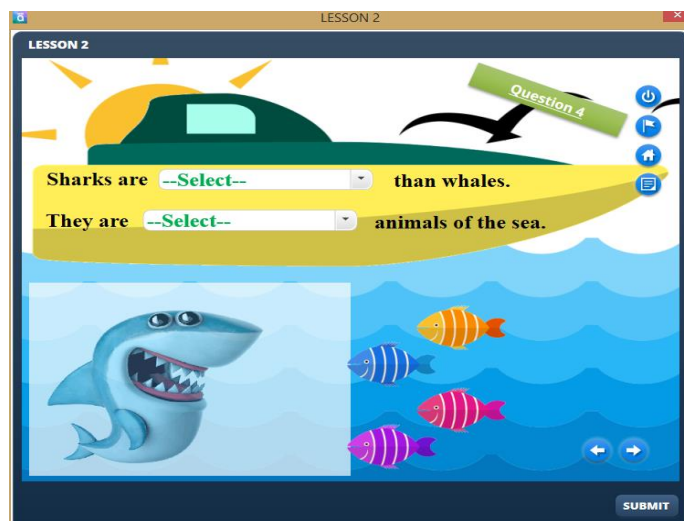
Figure 9.

An Example of Grammar Questions

The Listening and Speaking parts were the subsequent sections included in the software as shown in Figure 10.
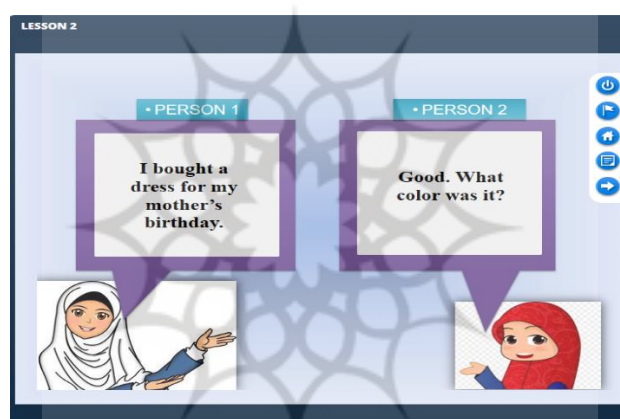
Figure 10.

Listening and Speaking Part

Students listened to the conversation while viewing the corresponding text. Figures 11 and 12 show examples of the Pronunciation and Writing sections, respectively.
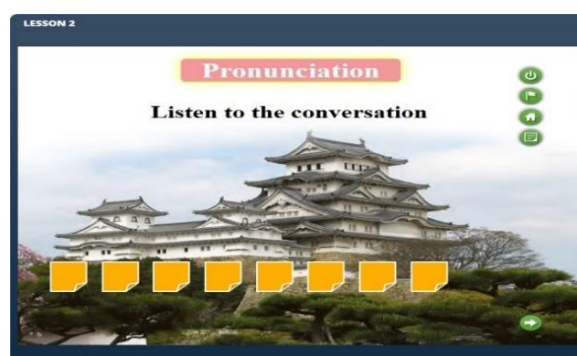
Figure 11.

Pronunciation Section

Figure 12.

Writing Section

At the end of the lesson, a brief quiz was included designed as a simple game. Jimmy wants to go scuba diving and he needs to earn points by users answering questions correctly (Figure 13).
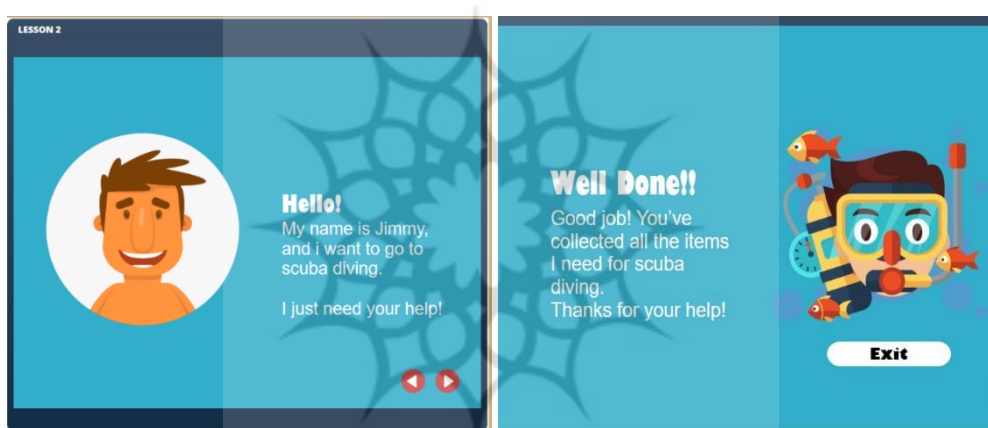
Figure 13.

Sample Pages of the Quiz Section

Finally, students could view their quiz results, as illustrated in Figure 14.

Figure 14.

The Results Section at the End of Each Quiz

Students received the software on a CD or a flash drive, based on their preference, to use on their home computers. They watched and listened to the material before going to the class. The teacher, during the first session, ensured that students could run the software without difficulty. Additionally, the teacher could also distribute the material online to students via social networking platforms.

Considering Vygotsky's theory, the teacher divided the students into four or five heterogeneous groups according to the results of the Babel Test. In groups, more knowledgeable students could provide scaffolding for others. When students were answering the questions and interacting with each other, the teacher provided individual feedback and support. To maximize instructional time between students and teachers, the teacher explained any misunderstandings or difficulties they encountered.

3.4. Data Analysis

To analyze data, SPSS version 22 software was utilized. To ensure the two groups were homogeneous in their language proficiency and perceptions of classroom activities, independent-samples t-tests and multivariate analysis of variance (MANOVA) were conducted. The same analyses were conducted on the post-test data. To determine whether the flipped learning approach influenced language learning, an independent-samples t-test was used. To examine whether the flipped experience influenced perceptions of classroom activities, a multivariate analysis of variance (MANOVA) was employed.

4. Results

To examine participants' proficiency level homogeneity, an independent samples t-test was run: control (M=7.27, SD=2.67), experimental (M=7.11, SD=3.26). The results revealed that there is no statistically significant difference between the two groups regarding the degree of their proficiency level (t= 0.67, p=.86). Besides, to ensure their perception homogeneity, MANOVA was run (Table 1).

Table 1.

Descriptive Statistics of Perceptions across Control and Experimental Groups

	Groups	Mean	Std. Deviation	N
interest	1.00	19.22	2.98	18
	2.00	21.16	2.81	18
	Total	20.19	3.02	36
challenge	1.00	19.88	4.67	18
	2.00	21.72	3.12	18
	Total	20.80	4.02	36
choice	1.00	14.61	3.58	18
	2.00	16.11	2.72	18
	Total	15.36	3.22	36
Joy	1.00	17.83	3.92	18
	2.00	19.44	2.63	18
	Total	18.63	3.39	36

(1= control, 2= experimental).

The results of MANOVA revealed that there was not a statistically significant difference between the two groups on the combined dependent variables: (F=1.03, p= .40, Wilks' Lambda=.88).

To examine the difference between control and experimental groups regarding language achievement, an independent samples t-test was run. The results showed that the mean scores of language learning across participants in the control and experimental groups are different: control (M=9.38, SD= 2.25), experimental (M=11.50, SD=2.06).

As Table 2 indicates, there is a statistically significant difference between the two groups regarding the degree of their language learning (t= -2.93, p=.00).

Table 2.

Independent Samples T-Test Showing the Results of Posttest on Language Learning

| | | Levene's Test for Equality of Variances | | | | | | |
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Babel-Post	Equal variances assumed	.71	.40	-2.93	34	.00	-2.11	.72
	Equal variances not assumed			-2.93	33.74	.00	-2.11	.72

To investigate the effect of the flipped learning approach on students' perceptions of classroom activities, the differences were computed in the post-test. As can be seen in Table 3, the means of the experimental group in all four perceptions are higher than those of the control group.

Table 3.

Descriptive Statistics Showing the Results of Post-Test on Perceptions

	Groups	Mean	Std. Deviation	N
Interest-Post	1.00	28.38	7.97	18
	2.00	32.11	3.70	18
	Total	30.25	6.41	36
Challenge-Post	1.00	25.72	4.07	18
	2.00	34.55	4.70	18
	Total	30.13	6.23	36
Choice-Post	1.00	14.50	5.10	18
	2.00	27.72	3.15	18
	Total	21.11	7.90	36
Joy-Post	1.00	26.38	8.18	18
	2.00	30.66	3.94	18
	Total	28.52	6.69	36

To see if these observed differences are statistically significant, MANOVA was run (Table 4), and the results indicated a significant difference between the two groups (F=26.54, p= .000, Wilks' Lambda=.22). This implies that about 65 percent of the variance in perceptions can be accounted for by the flipped learning approach employed in the experimental group.

Table 4.

MANOVA Table Displaying the Results of Perceptions across Control and Experimental Groups

	Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Square
Level	Wilks' Lambda	.22	26.54	4.00	31.00	.000	.65

As Table 5 demonstrates, the difference holds true across three perceptions: Challenge (F=36.28, p= .00, partial eta squared =.51), Choice (F=87.39 p= .00, partial eta squared =.08), and Joy (F=3.99, p= .05, partial eta squared =.10). As can be seen, the highest differences are observed in Choice and Challenge perceptions with no significant impact on Interest perception. The results demonstrated that the flipped learning approach could account for over 70 percent of Choice perception, about 50 percent for Challenge, and 10 percent for Joy perception.

Table 5.

MANOVA Table Displaying the Results of Three Types of Perceptions across Control and Experimental Groups

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Groups	Interest-Post	124.69	1	124.69	3.22	.08	.08
	Challenge-Post	702.25	1	702.25	36.28	.00	.516
	Choice-Post	1573.44	1	1573.44	87.39	.00	.720
	Joy-Post	164.69	1	164.69	3.99	.05	.105

5. Discussion and Conclusion

Considering the first research question, the results showed that the flipped model positively affected the learners' perceptions of classroom activities. According to the findings of this study, the flipped learning model enhanced the joy perception by about 10 percent. In the pre-class learning phase in the flipped learning model, students worked with the software, which included colorful pictures, background music, and some interactive activities. In comparison to studying the mainstream book, these kinds of activities were likely more enjoyable for students. As Little (2012) stated, engaging in activities and feeling joy have a positive correlation and, in this study, working with the software creates a greater likelihood of engagement in the activities potentially leading students to experience higher levels of joy.

The second finding is related to 'Choice' and the results indicated the highest impact (70%) of the implemented flipped learning model on this dimension. Street (2001) suggested instructors provide learners with choices in activities to foster their motivations. In the flipped learning model, learners can select each section of the software and do related activities in their preferred order and at their own pace, as often as needed. Hence, they have significant autonomy in choosing the first and second levels of Bloom's taxonomy before going to the class.

Thus, the flipped learning model was found to have a stronger impact on students' perception of Choice (reflecting autonomy and control) compared to Joy (reflecting immediate emotional enjoyment) due to the fundamental ways the method restructures learning. This difference stems from the distinct nature of these two subcategories. In flipped classrooms, students engage with pre-class materials (videos, readings, quizzes) at their own pace, allowing them to pause, rewind, or revisit difficult concepts. Furthermore, unlike traditional lectures, flipped learning often incorporates choice-based activities. Research indicates that when students have input into their learning pathways, their sense of ownership and motivation increase. In contrast, Joy is more variable and context-dependent. While some students enjoy the flexibility and independence, others may experience stress (Chen Hsieh et al., 2017). Unlike Choice, which is structurally embedded in flipped models, Joy is more subjective; some learners prefer structured, teacher-led environments.

The third aspect of the study was on the effects of the flipped model on the Challenge perception and the results showed that the Challenge dimension was positively affected, showing a 50 percent enhancement. Considering the definition of challenge, a "stimulating or interesting task or problem" (Chval & Davis, 2008, p. 27), the flipped classroom requires students to answer more questions from their instructors and their classmates, which can result in them facing more challenges. In their groups, formed according to Vygotsky's Zone of Proximal Development theory, less proficient students encounter challenges interacting and doing activities with more proficient students. Similarly, more knowledgeable students face the challenge of effectively scaffolding less proficient peers within their group.

All in all, the findings of the present study showed a significant positive effect of the flipped learning model on students' perceptions of classroom activities, which is consistent with previous studies (Unal & Unal, 2017) and most learners reported a more enjoyable environment in flipped classrooms in comparison to traditional classes, supporting the findings of previous studies (Grypp & Luebeck, 2015; Huang & Hong, 2016).

The second research question investigated the effect of flipped model on students' achievement. The findings of the present study showed significant improvement in students' learning; the mean scores of the experimental group on the post-Babel test were higher than the control group, corroborating the results of the previous studies (Bhagat, 2016; Chao, 2015). By maximizing the value of in-class time in the flipped learning model, students have the chance of experiencing higher levels of Bloom's taxonomy, analyzing, applying, evaluating, and creating, which can help them improve their mastery (Unal & Unal, 2017).

Furthermore, flipped learning can simulate authentic situations and help learners practice English in semi-authentic situations and receive immediate feedback from their instructor and classmates (Mehring & Leis, 2018). Therefore, the results regarding the effect of the flipped method on EFL students' achievement are in line with previous research (e.g., Bicen & Beheshti, 2022; Lee & Wallace, 2018; Yan, 2024). Fitriah (2025), for instance, conducted a meta-analysis to examine studies published between 2015 and 2024 investigating flipped learning and student achievement. They analyzed 14 articles, all of which found a positive effect of the flipped classroom on EFL students' proficiency and skills (e.g., Etemadfar et al., 2020; Hosseini, 2021; Öztürk & Çakıroğlu, 2021; Putri, 2024; Yulian, 2021).

The results partially contrast with those of Cabi (2018), who found no significant effect of flipped classroom on students' performance. Other studies have also reported no significant effect of flipping on learner outcomes (e.g., Sun & Wu, 2016). These divergent results may be attributed to differences in students' learning styles and strategies.

Implementing flipped classrooms in Iran might face several contextual challenges due to unique educational, cultural, and technological constraints within the country. These factors include:

1. Technological and infrastructure limitations: Some students, particularly in rural or low-income areas, lack reliable internet access, smartphones, or computers, making pre-class video lectures and online activities inaccessible. Also, Internet speeds can be slow, and government restrictions (e.g., blocking platforms like YouTube) limit access to educational content unless localized alternatives (e.g., Aparat, Shad app) are used. Moreover, both teachers and students may lack sufficient training in using digital tools effectively for flipped learning.

2. Sociocultural attitudes toward pedagogy: The educational system in Iranian public schools has long relied on lecture-based, teacher-dominated instruction (Ghanizadeh & Rostami, 2015). Students and parents may resist

student-centered approaches, expecting direct instruction. Many students are accustomed to rote memorization and exam-focused learning, making active learning (e.g., discussions, problem-solving) in flipped classrooms unfamiliar and challenging. Also, in single-gender schools of Iran, flipped learning dynamics may differ, with some studies suggesting girls may engage more in online discussions, while boys may need more structured accountability.

3. Curriculum and assessment constraints: The Iranian Ministry of Education mandates a fixed syllabus, leaving little flexibility for teachers to redesign lessons for a flipped model. On the other hand, high-stakes exams (e.g., Konkur for university entrance) prioritize content coverage over critical thinking (Ghanizadeh & Rostami, 2015), discouraging innovative methods like flipped learning that emphasize deeper engagement. Finally, teachers often have little freedom to modify content or assessment methods to implement flipped learning effectively.

4. Institutional and logistical barriers: Many English teachers in Iran are not trained in flipped pedagogy, and professional development opportunities are limited. School leaders may be skeptical of its effectiveness or reluctant to adopt it due to accountability concerns, and large class sizes make individualized attention harder to achieve.

5. Economic and policy factors: Public schools often lack resources to provide devices or digital infrastructure for flipped learning and policies on digital content (e.g., filtering, approval of online materials) can hinder access to global ELT resources (Ghanizadeh & Rostami, 2015).

Despite these challenges, some strategies could improve flipped classroom adoption in Iran; such as hybrid models (offline digital resources), localized platforms (Shad, Aparat), teacher training (like workshops), and parental involvement. Thus, while flipped learning has potential in Iranian ELT, its success depends on overcoming infrastructural, cultural, and systemic barriers. Tailored solutions that consider local constraints are necessary for effective implementation.

The findings of this study would help EFL practitioners to design flipped courses by using appropriate tools and following special guidelines. Considering the results of the present study, they would be able to make their own flipped courses to enhance the learning gain of their students. This study would make sure the instructors and material developers of the positive effects of the flipped learning classrooms on Iranian learners, especially K-12 students, and they would be able to use the result of this study to design more enjoyable and motivational classes.

The results of this study also would help instructors and practitioners from other fields to use technology in their teaching program and be optimistic about its amazing results in their learners' outcomes. There are successful models of flipped courses in other fields, for example, math, that was reviewed in chapter two for non-Iranian learners that Iranian practitioners can develop and replicate them for Iranian learners, as this study did. Future studies can examine the effect of this kind of learning on other grades of the k-12 program in Iran and private institutes and study other aspects of the flipped learning classes in Iran and its effects on teachers as well as learners.

The findings and limitations of the present study suggest possible avenues for future studies: Future studies can examine this effect for different ages and different genders. One key issue is gender-based learning differences, which may introduce selection bias. Studies suggest that male and female students often exhibit distinct learning preferences, engagement patterns with technology, and classroom participation styles. These inherent differences mean that results from a single sex may not accurately predict outcomes in other educational settings. Without accounting for these variations, the study's conclusions could be misleading when applied to broader educational contexts.

Besides, researchers can conduct their research in private institutes instead of schools. The time of the study can be expanded and instead of one semester, it can be applied for one or even some years to find out the longitudinal effects of this kind of learning. Future studies also can design special courses with different tools and different ways of content delivery and different style of materials development to find out the effect of each element on the quality of the course. Besides, special courses can be designed to investigate the effect of the flipped learning model on each of the main skills for Iranian learners, including reading, writing, listening, and speaking. The effect of this kind of learning also can be studied in the ESP area.

6. References

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