

English Reading Comprehension Achievement as a Result of Iranian EFL Online Flipped Classrooms

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Abstract

Flipped classrooms refer to teaching approaches that like usual teaching is not done inside the class. It means that before the class students watch videos that the teacher carefully chooses or prepared. The selected videos have to fulfill the required content that advances the abilities of the students in their learning. This study investigates the influence of online flipped classrooms on Iranian EFL high school students' reading ability. To this aim, the study was done on 50 EFL 12th-grade and pre-intermediate level female students. The students were set into two groups experimental and control. A reading test was run on both groups as the pre-test, at the beginning of the study. Then, after 10 treatment sessions, the post-test was given to both groups. An independent samples t-test was run to compare the means. The outcomes illustrated the significant outperformance of the experimental group over the control group. In addition, to identify the EFL high school students' attitudes toward the flipped classroom, the students were asked to answer an open-ended question. The results of students' responses using thematic coding showed that most of the students had optimistic opinions regarding implementing the flipped classroom. Finally, the present study indicated that this model provides an opportunity for students to learn at their own pace and time. Therefore, it has some implications for teachers, students, and institutions which can increase student-teacher interaction in the teaching-learning process.

Keywords: Flipped Classroom; High School Students; Online Classroom; Reading Comprehension.

1. Introduction

With the spread of Covid 19 which leads to the closure of schools in Iran, as in other countries, the educational systems have changed dramatically, and teaching and learning started to occur remotely using online platforms (Tabatabaee-Yazdi, 2022). This sudden shift forced individuals to adjust to virtual teaching and learning and helped teachers to come up with effective strategies. Therefore, by applying technology teachers will have more chances to personalize instructions, traditional and face-to-face methods of teaching were abandoned and educational resources were chosen in a way that had an important effect on increasing the quality of both learning and teaching (Bergmann & Sams, 2014). Indeed, Interaction in the online environment is different from face-to-face classes. While interaction is face-to-face in physical classrooms, it is through the school's online platforms or social media applications in online classes. However, not every student is willing to participate in these types of classes.

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Understanding online interaction between students is important as it affects their learning (Sadeghpour et al., 2022; Trentin, 2000). This approach is a pedagogical teaching model that attracted many studies over the last decade (Abuhamid & Mohammad, 2020; Yang, 2017). Accordingly, an important factor in designing flipped classrooms is providing easily accessible technologies which are familiar to students as well (Khanahmadi, & Nasiri, 2022; Kim et al., 2014). After students learn the material, teachers apply direct teaching first outside the classroom using independent or group learning. Similarly, by analysis and discovery, students can acquire experience from the learning procedures. In addition, in this model, the conveying of the content is normally gained using online videos that the teacher or others prepared. Students watch videos earlier in the class which is influential and play a significant role in directing students' attention to learning (Abuhamid & Mohammad, 2020). The online-based of this approach maintained integrated technology in teaching procedures. This approach makes an educational setting that can create original opinions in-class activities. Accordingly, participants achieve additional direct information from their logical process to seek the fact (Abeysekera & Dawson, 2015). In this method, instructors can make lessons before class time and assess within the online flipped classroom to match student understanding with the lessons. Therefore, this learning process is more focused on a student-centered learning approach (Slomanson, 2014). Therefore, teachers use the time in class successfully for tasks or other activities to encourage students to practice and learn the content from the pre-class requirement (Harris et al., 2016).

Moreover, reading is considered a valuable source of input and plays a main role in process of language learning. It helps pupils gain knowledge, increase their understanding of different subjects, and therefore, help them in reaching their academic goals (Renandya & Jacobs, 2002). In addition, reading skill is not only getting the meaning of words, sentences, and texts, but also it contains a multipart combination of the reader's previous knowledge, language ability, and metacognitive plans. Besides, reading means thinking and making meaning using readers' background knowledge (Kirmizi, 2010). Furthermore, although reading comprehension is an important skill during schooling, most students have difficulty in learning and mastering it (Suryaningrat & Syahril, 2021). Although the main emphasis of all high school English programs in Iran is reading, the act of pupils both in the final and Iran university entrance examination is disappointing (Bahrami & Nosrätzadeh, 2017). Accordingly, flipped classroom increases motivation, collaboration, and performance, and advances learning outcomes (Alsancak Sirakaya & Ozdemir, 2018). Most importantly, it provides students with more chances to communicate and be responsible for their learning and advances students' creativity concerning fluency, flexibility, and novelty (Aljaser, 2017; Al-Zahrani, 2015). Thus, this study aims at investigating any significant effect of the flipped-classroom approach on students' reading comprehension skills. The results of this research study can be useful for teachers who emphasize teaching English in educational organizations and whose main concern is their students' reading comprehension ability. Accordingly, the following study questions are going to be replied to in this study.

Q1. Do online flipped classrooms have any significant effect on Iranian EFL high school students' reading comprehension ability?

Q2. What are Iranian EFL high school students' attitudes toward online flipped classrooms?

2. Review of Literature

2.1. Flipped Classroom

Flipped classrooms refer to teaching approaches that the usual teaching is not done inside the class. It means that before the class students watch videos that the teacher carefully chooses or prepared. The videos have to fulfill the required content that advances the abilities of the students in their learning. It is essential to note that the teaching is not restricted to videos and the teaching can also be done using audio as an alternative to the videos which can be used by the students (Bergmann & Sams, 2014). Flipped classrooms help the notions of dynamic learning and student participation. The arranged class time is used up in workshops where students explain the lessons' content which in turn leads to more students cooperating in tasks that put everything students have learned into practice. Therefore, the job of the teachers as trainers or facilitators is to encourage the students to work on their success (Bergmann & Sams, 2014).

Consequently, in this approach, the content is typically delivered using online videos selected by the teacher. Learners are asked to watch teaching videos before the class which impacts their learning. Besides, using preplanned videos is an e-learning tool that uses the Internet for teaching while giving students control over their learning (Bridge et al., 2009). Thus, videos as a tool to deliver teaching materials to students are considered to be powerful, especially when mixed with other teaching aids. According to Gustilo et al. (2015), watching videos in dynamic learning settings that are facilitated by teachers led to better retention and achievement of the learners. Accordingly, flipped classroom method is a model in that learners equally take part in class performances and deal with their online self-learning (Afrilyasanti, Cahyono & Astuti, 2017). Therefore, students can build knowledge at home while they engage in collaborative activities with peers within the class (Afrilyasanti et al., 2017). Therefore, in this approach, learners learn the materials before the class so that the class time is spent practicing the materials through problem-based and dynamic learning without spending time delivering the teaching content (Zainuddin, 2017).

In addition, Bergmann and Sams (2014) noted that this approach can be easily used in any type of class and teaching setting. As a new approach, it evaluates the traditional ways of teaching that instructors were just sources of knowledge and no critical roles were assigned to students during the teaching process (Freeman et al., 2014). Accordingly, it is known as a pedagogical approach that makes students motivated to participate by increasing support from the teachers and peers in doing tasks and homework (Kross & Guo, 2019). Thus, this approach focuses on students' preparation in advance and lets teachers spend more time focusing on student-centered learning.

Various advantages of flipped approach have been noted in the literature such as the flexibility that this approach gives the students to learn in any place and at their own pace using pre-class preplanned materials (Karabulut-Ilgu et al., 2018). Besides, since this approach covers both out-of-class and in-class activities, it offers modified instruction to varied students' proficiency leading to the learners' cognitive load management (Abeysekera & Dawson, 2015). Using this approach, students are asked to work cooperatively which requires them to learn the main concepts and use what they have learned through meaningful in-class interactions. Thus, the approach put students in situations to divide their activities and collaborate while doing their tasks both inside and outside the classrooms to decrease cognitive load during the collaborative learning process (Tucker, 2012).

Considering it a learner-centered approach (Bergman & Sams, 2014), some researchers asserted that the flipped model can promote active and collaborative learning (Betihavas et al., 2016; Lai & Hwang, 2016) since as noted by Bishop and Verleger (2013), student-centered approaches of learning highlights theories of active, peer-assisted, collaborative, and dynamic learning. Therefore, the approach gives the students the opportunity of experiencing active and collaborative learning as well as do higher-order thinking activities (Roehl et al., 2013) which led to the students' transitions from passive listeners into active learners.

According to Nederveld and Berge (2015), various chances are available in flipped classrooms for peer-assisted learning in-class activities as well as out-of-class activities incorporating collaborative learning. The approach also leads to deep learning and shared understanding (Kreijns et al., 2003). It also gives the chance for students' social abilities improvement (Johnson & Johnson, 1999). Therefore, since class time is not for the delivery of the content through lectures, teachers can apply cooperative small-group tasks to make interaction with the students acting as a facilitator her/himself (Bergmann & Sams, 2014).

Accordingly, flipping an English classroom increases teachers' time and students' interactions. It also helps teachers to identify the students who need more instruction and help. Likewise, it maximizes the students' time because they have already studied the lessons and can use the class time to explain the concepts and the things they have learned. Besides, since technology fuels flipped classrooms, it surges students' motivation to carry on with their learning (Sarpparaje et al., 2018). In addition, Alsowat (2016) asserted this approach is effective in advancing learners' critical thinking abilities and pleasure because the approach is integrated with technology, and technology plays a key role in students' learning. Moreover, using this approach helps instructors to allocate their time to observation, feedback, and assessment. It also includes project- and problem-based tasks (Carhill-Poza, 2019). Arifani (2019) asserted that the flipped method can develop EFL students' cooperation because it centers on the idea that learning is personal and happens in active and interactive environments (Bergmann & Sams, 2014; Bishop & Verleger, 2013).

However, the flipped approach may have some disadvantages, too. For example, it increases the time needed for setting the materials and tools for technology support, finding online resources for out-of-the-class activities, and designing various activities to achieve critical thinking (Bauer-Ramazani et al., 2016). Also, watching videos and reading materials before class can be considered additional homework for students, which can negatively impact students' learning (Bergmann & Sams, 2014; Lee & Wallace, 2018).

With the help of its supportive properties and contributions to the teaching and learning processes, the flipped classroom approach offers some major benefits. One of the advantages of a flipped classroom is that the class time can be managed more efficiently and creatively and it also saves time for engaging and collaborative activities for students (Baker, 2000; Cole & Kritzer, 2009). Another advantage of this model is that it has a positive influence on the collaboration between students and teachers (Arnold-Garza, 2014; Bergmann & Sams, 2014; Lage et al., 2000; Roehl, Reddy & Shannon, 2013). Teachers play an important role in the lives of students. They are guides, facilitators, helpers, or mentors for them. Therefore, a supportive interaction between their teachers directly influences their success in the class. It also aids students to interact with their teachers when they observe their learners in more detail and support struggling students (Fulton, 2012; Lage et al., 2000). The teachers use the time to teach the knowledge using hands-on tasks, homework, and engaging and collaborative tasks. So, teachers provide learners with individualized assistance when they have problems and misinterpreted issues (Uzunboylu & Karagozlu, 2015). This means that teachers can upgrade their curriculum according to learners' needs (Fulton, 2012). In the traditional teaching approaches, students are supposed to learn all of the teaching materials presented by the

teachers; however, some of the learners cannot follow the class speed and are unable to do activities. Thus, the flipped approach is considered an ideal way that provides its own speed. In this case, students can pause or rewind the videos to comprehend and modify their misunderstandings (Al-Harbi & Alshumaimeri, 2016; Uzunboylu & Karagozlu, 2015).

According to Moffett and Mill (2014), to gain knowledge, flipped approach requires learners to be motivated; consequently, if students are not motivated to experience online learning, the result can be efficient for neither students nor teachers. In addition, Jawawi et al. (2015) noted that although learners have to have access to computers and the internet, the needed tools can be limited which highlights the difficulty of having access to technology for students from low-income families (Kissi et al., 2017). Furthermore, Milman (2012) focused on the impacts of poor-qualified videos on students' success. Besides, Halili and Zainuddin (2015) highlighted the increasing workload of the teachers since they need to prepare preplanned videos and materials, and monitor their students both inside and outside the classroom.

Accordingly, this approach requires a flexible setting, planned content, and an expert instructor as its basis (Bauer-Ramazani et al., 2016). A flexible setting refers to a learning environment that is flexible in terms of time and place. Planned content means that this approach aims at advancing students' knowledge and cognitive skills. Finally, the expert instructor focuses on the role of instructors in planning high-quality videos and materials to facilitate tasks, assessing, and feedback (Mcnally et al., 2017). Sung (2015) studied the language students' opinions of the flipped classroom approach and showed a significant effect of applying it on students' language improvement. Besides, Basal (2015) reported that pre-service English language teachers had positive views about the application of this approach. He stated that the approach is effective in learning at one's own pace, advancing learners' planning, overwhelming the boundaries of class time, and growing participation in the classroom, according to the analysis of the teachers' opinions. Lane-Kelso (2015) studied Omani students' attitudes toward the use of the flipped approach. The results showed learners' motivation about the flipped classroom though they were not eager and ready to use it in their classroom at the beginning since the approach requires educating school administration, colleagues, and parents. Likewise, Al-harbi and Alshumaimeri (2016) asserted that watching prepared videos before class time was significantly effective in students learning since the students can get back to the videos and materials after the class. Accordingly, Ching Lin and Chen (2016) showed that not only students but also teachers believed that flipped approach has a positive influence on learners' satisfaction and improvement. Accordingly, Abaeian and Samadi (2016) worked on the consequence of this approach on Iranian EFL learners' English reading comprehension. Their findings confirmed that intermediate students were more successful compared to the upper intermediate ones.

Accordingly, Kurt (2017) reported on the motivation, relaxation, and confidence of the pre-service teachers who were engaged in flipped classrooms because of pre-class learning. Additionally, another study was done by Pudín (2017) to find out the opinions of students about their grammar improvement through the application of the flipped approach. The findings illustrated that although students were more motivated and interested in taking part in this class since it gives them the chance to communicate with their classmates while learning grammar, some of the students feel uncomfortable at the beginning of the class due to unfamiliarity with the approach. Lee and Wallace (2018) studies Korean students' opinions about the flipped method and showed students' motivations and interests in using this approach. In addition, Hashemifardnia et al. (2018) worked on the impact of using flipped classrooms on Iranian high school students' reading skills. The results showed that the operation of this approach can have positive effects which resulted in the independents of the students.

Besides, Kirmizi and Kömeç (2019) studied the impact of the flipped classroom on vocabulary learning. The results showed that flipped teaching effectively and meaningfully increases the students' vocabulary expansion. They also showed that students who received flipped vocabulary teaching usually had optimistic views on this approach. Accordingly, the study's findings showed that watching videos was enjoyable for the learners, and class activities led them to long-lasting vocabulary achievements. Students also noted positively the self-pacing and preplanned video materials. Besides, students asserted a positive advancement in their speaking and listening skills due to watching the video materials in English. Similar results also were addressed in the literature about the advantages of flipped classrooms (Basal, 2015; Davies et al., 2013; Han, 2015). Sin and Siahpoosh (2020) examined the effect of the flipped approach on Iranian EFL students reading skills. Based on the findings, they showed that this approach can have significant results since it can engage students in learning English. They also stated that flipped teaching in EFL classes will provide positive effects. Besides, English teachers may be benefited from the results of this study while developing and upgrading their teaching methods. Andujar et al. (2020) also studied the opinions of 84 Spanish EFL students about the implementation of flipped learning approach. They reported a highly significant overall satisfaction level toward the approach (Andujar et al., 2020). Moreover, Bataineh and Al-Sakal (2021) studied the potential impacts of the flipped approach on EFL reading skills. The findings showed that this approach advances teacher-student interaction, highlights learner-centeredness by providing an individual and collaborative learning environment, and helps teachers to be free from acting as the traditional authoritative sources of knowledge.

Dehham et al. (2022) also examined the Iraqi EFL introductory students reading comprehension through flipped learning approach. They used this approach to teach intermediate students reading skills. They showed that the approach has a positive effect on the development of students reading comprehension skills. They also illustrated that the flipped approach engages students and makes the learning and teaching environment more enjoyable. Besides, their findings showed that this approach can give students chances to practice public expansion, which is a key life skill. The approach also led students to enjoy more freedom even in low-level classes by providing learners with more chances to learn from their peers. Accordingly, it is because language students in Iran suffer from the inability to understand the text and the inability to connect ideas easily in a passage during class time the researcher aimed at implementing the flipped classroom to use the traditional teaching of reading skills with online flipped classroom teaching (Bahrami & Nosratzadeh, 2017). Moreover, to cover the qualitative side of the study and to recognize the EFL high school students' attitude toward the flipped classroom, the students were requested to answer an open-ended question.

3. Method

3.1. Participants

This study was done on 50 EFL high school students in 12th grade (i.e., pre-intermediate level) who were all studying in the field of Humanistic sciences in Golbahar, a small town near Mashhad, Razavi Khorasan province, Iran. Since the participants were high school students studying in Iran, Females were the only ones who participated in this study. They were 17 to 18 years old, and their native language was Persian. Because the Iranian high school classes are considered intact preplaced groups of students, the participants were selected non-randomly as two intact groups to investigate the probable effects of an online flipped classroom on the student's reading comprehension abilities. One group was the experimental group and the other one was the control group, each consisting of 25 participants.

3.2. Instrumentations

Students' reading comprehension, in this study, was assessed using a standard and valid reading test including 20 four-multiple-choice questions selected from the reading section of one of the official past Iranian University Entrance Examinations. The test had three passages with lengths of 428, 466, and 504 words. The test was used as both a pre-and post-test. The Cronbach's alpha reliability of the reading test was 0.94. Besides, to examine students' attitudes toward implementing online flipped classrooms, they were asked to answer an open-ended question at the end of the post-test as a qualitative part of the study.

3.3. Procedures

The present study applied an online flipped platform at a high school in Iran. The high school students were equipped with SHAD software that was accessible to all participants. The entire study was taken over six weeks. Twelve sessions (two days a week) were run to implement the study. One session was for the pre-test, one for the post-test, and ten sessions were devoted to the treatment of the study. The pre-test was administered in the first session to ensure the homogeneity of the participants regarding their reading abilities, and the post-test was administered in the last session to find out any significant difference between the two groups. In addition, the participants were divided into two groups non-randomly, one as an experimental group and the other one as the control group to find out the possible effects of the treatment (online flipped classroom) on students' reading comprehension ability. Both groups took the same pre-and post-tests. To apply online flipped classrooms, the materials were prepared through videos, audio, video clips, PowerPoints, worksheets, and other online materials, which were related to the class tasks. Each treatment session lasted 45 minutes. The videos for the presentation of the content of each session were selected through YouTube or were made by the teacher. The duration of each video varied from 10 to 20 minutes. The experimental group was required to watch the videos or read the text and answered the comprehension questions before attending the online classroom. Accordingly, each session of the online flipped classroom was taken 45 minutes and included 10 minutes for warm-up, 15 minutes for checking comprehension answers and clarifying questions, and 20 last minutes for interaction, problem-solving, and doing exercises. In contrast, the control group did not receive any treatment. They received the same content as the video lectures in traditional ways in the online class. In addition, the control group was required to accomplish some related tasks as homework after class time. Finally, in the last session, both groups were taken the same post-test to find out the significant effects of the online flipped classroom on Iranian EFL high school students' reading comprehension ability. The probably needed time for answering the questions was about 45 minutes. Moreover, to identify the EFL high school students' attitudes toward the flipped classroom, the participants were asked to answer an open-ended question.

3.4 Study Design

In this study, the researcher used a quantitative-qualitative quasi-experimental design. The study was going to investigate any significant impacts of the online flipped classroom (independent variable) on Iranian EFL high school students' reading comprehension ability (dependent variable) quantitatively, and study the participants' attitudes toward online flipped classrooms qualitatively.

4. Results and Discussion

The Kolmogorov-Smirnov test, which was used to see if the data in this study were normal, proved that the data collected from both tests had normal distributions. To prove the homogeneity of the groups at the beginning of the study, an independent samples t-test was run (Table 1). The results indicate that $t(48) = .619$, $\alpha = .05$, $p = .539$, suggesting that the two

groups were homogeneous in terms of their reading comprehension ability, and no significant difference was observed between groups in the pretest.

Table 1
Results of Independent Samples T-test for the Reading Comprehension Ability Pretest

Levene's Test for Equality of Variances		t-test for Equality of Means						
F	Sig.	t	df	Sig.	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
.405	.528	.619	48	.539	.480	.776	-1.080	2.040

Then, in order to examine the effect of online flipped classrooms on Iranian EFL high school students' reading comprehension ability, their post-test scores were compared using an independent samples t-test (Tables 2 & 3).

Table 2
Descriptive Statistics of Control and Experimental Groups on Reading Comprehension Ability Posttest

	Group	N	Mean	Std. Deviation
Posttest	Control	25	9.88	3.395
	Experimental	25	14.20	2.646

Table 2 indicates that the post-test in the experimental group is 14.20 and 9.88 in the control group which illustrated a mean growth in the post-test scores, and this increase is greater in the experimental group. To see whether this progress was statistically significant or not, the researcher used an independent samples t-test (Table 3). The results showed that there was a statistically significant difference between the experimental and control groups ($t(48) = -5.018, p < 0.05$) in their performance on the post-test. Therefore, it can be concluded that treatment in the experimental group was effective, and implementing an online flipped classroom significantly affected the Iranian EFL high school students' reading comprehension ability.

Table 3
Independent Samples t-test between the Control and Experimental Groups on Post-test

Levene's Test for Equality of Variances		t-test for Equality of Means						
F	Sig.	t	df	Sig.	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
1.668	.203	-5.018	48	.000	-4.320	.861	-6.051	-2.589

In order to examine the Iranian EFL high school students' attitudes toward online flipped classrooms, the students' responses were analyzed using thematic coding (Clarke & Braun, 2013). After analyzing the extracted codes, the percentage of each coding item was analyzed (Table 4). The results showed that the most frequently stated advantage was that *the students feel more responsible for their learning* (8.9). However, 15.2% of the learner stated

that *have no access to the Internet*, and 11.4% of students believed that flipped classrooms are not a good method of teaching since *they have no direct interaction with their teachers*. Details of other advantages and disadvantages are presented in Table 4.

Table 4
Advantages and Disadvantages Extracted from Open-ended Question

Secondary codes	Advantage	Disadvantages	Percentage
Studying the lessons before the class	√		3.8
More time to clarify concepts before class time	√		6.3
Lack of access to the internet		√	15.2
Responsible for their learning	√		8.9
Active learning	√		6.3
Lack of direct interaction		√	11.4
Solve problems	√		7.6
Cannot comprehend the videos		√	2.5
Useful class time	√		1.3
Engaging in the learning process	√		7.6
Student-centered learning	√		1.3
More screen time		√	1.3
Lack of professional device		√	7.6
Learned freely	√		1.3
Pre-assisted learning	√		2.5
More active	√		2.5
Quality teaching	√		1.3
Lack of communication		√	2.5
Independent learning	√		1.3
Deeper understanding	√		5.1
Feeling of isolation		√	1.3
Lack of teaching resources		√	1.3

During the covid 19 pandemic, all schools in the world faced a challenging education system. In addition, most of the schools were closed and distance education started to appear. traditional and face-to-face methods of teaching were abandoned and educational resources were chosen in a way that had a significant effect on increasing the quality of both teaching and learning (Bergmann & Sams, 2014). Accordingly, this study aimed to see the effectiveness of the empirical impact of the flipped approach based on online platforms. The results of this study indicated that implementing an online flipped classroom significantly affected the Iranian EFL high school students' reading comprehension ability which is in harmony with the study of Abaeian and Samadi (2016) and Karimi and Hamzavi (2017) who explored the power of the flipped classroom on reading skill of EFL learners in a private language institution. They reported that this model has an optimistic effect on students' reading skills. In addition, in line with Afrilyasanti et al., (2020), this model made a noteworthy change in students' scores of Indonesian EFL students' writing ability in secondary schools. Furthermore, Hashemifardnia et al., (2018) showed that Iranian EFL students could benefit from attending flipped classrooms by making the learners work on their own by learning how to study out of the classroom. Despite the above research, Fraga and Harmon (2014) showed no significant differences in learners' progress when using this

approach though students liked the approach due to its time flexibility and having control over their learning.

The current study also showed the Iranian EFL high school students' attitude toward online flipped classrooms which is in accordance with a number of other research. Among these studies, Tucker (2012) asserted that in flipped classrooms learners use the class time to work cooperatively and participate in group work which in turn leads to students' engagement compared with the traditional teaching approaches. Moreover, using this approach helps instructors to allocate their time to observation, feedback, and assessment (Marshall & DeCapua, 2013) which makes learners more responsible for their learning (Bergman & Sams, 2014). Besides, Alsowat (2016) stated this model develops learners' motivation, critical thinking, and engagement.

Although the flipped classroom approach is viewed as a learner-centered approach, some disadvantages have been stated by different research which is in harmony with the results of the current research. For instance, Milman (2012) criticized flipped classroom approach in the possible negative impacts of poor-qualified videos on students' success. In addition, this method leads learners to be more motivated to learn and helps them to work on their success in class (Moffett & Mill, 2014). Besides, Moore and Chung (2015) stated since each individual has a specific learning style, flipped approach may not be able to cover all the students' needs and preferences. For instance, some learners may have difficulty understanding the content from videos or online resources and prefer the traditional teaching methods to have face-to-face interaction with their teachers. Jawawi et al. (2015) stated that students are required to have access to computers, the Internet, and technology to watch videos or listen to files. Additionally, Internet connectivity problems may block the success of this approach (Andujar et al., 2020).

5. Conclusion

The results of the present study showed that treatment in the experimental group was effective and that implementing an online flipped classroom positively and significantly impacted the 12th-grade EFL high school students' reading skills. Furthermore, online flipped classrooms activate students learning outside the classroom environment. Additionally, the findings showed that flipped classrooms improve students' reading skill as well as their overall attitudes toward this model and students' motivation, engagement, and collaboration. Besides, according to the findings of this study integration of flipped classrooms in the process of learning can be influential in advancing students' reading ability. It can also be concluded that in this approach students become more active participants and they learn in an active mode. Accordingly, Huong et al. (2018) asserted that flipped method advances learners' critical thinking so that they can have complete control over their learning.

This study has some implications for teachers, students, and institutions. Flipped classroom model is introduced as a means to potentially increase student-teacher interaction in the teaching-learning process. In addition, it is an instructional method that shows promise for learner-paced learning, utilizing class time for deep and effective learning tasks, and helps students become self-directed students (Clark et al., 2015). Accordingly, Alsowat (2016) stated that flipped classrooms tend to improve students' higher-order thinking, engagement, and collaboration competencies. Additionally, flipped classroom makes students move away from lecture-based learning. It gets them closer to dynamic and active learning so that both teachers and students can collaborate actively. In other words, this approach requires more preparation time and involves learner resistance to a new method, responsibility, and content coverage. Furthermore, the flipped model can be spread across educational institutions because, it seems, this approach is a win-win educational position for students and teachers.

The limitation of this study can be elaborated through the following aspects. Because the students in Iranian schools are preassigned to their classes, the researcher samples them non-randomly. Moreover, due to slow internet speed, the quality of the video lectures in some online environments may be poor. Students may not watch the videos; therefore, be unprepared for the class activities. To delimit the study, the researcher chooses the Shad application as the class platform for the delivery of the instructions. The study also is delimited to Golbahar and just reading comprehension skills as this study's focus. Besides, the participants were 12-grade female high school students. Therefore, those who are intended to conclude the findings of this investigation should be careful with generalizing the outcome.

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