

## STUDENTS' PERCEPTIONS OF THE INCORPORATION OF FLIPPED LEARNING INTO L2 GRAMMAR LESSONS

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### Abstract

The present study examined EFL learners' perceptions of using flipped learning procedure in a grammar class. The participants recruited were 60 Iranian intermediate male EFL learners, randomly assigned to an experimental and a control group. The learners in the control group, having no preparation prior to class, were given direct instruction by using whiteboard with no or little use of interactivities in their grammar lessons. The instruction in the experimental group, however, featured flipped learning through *WhatsApp* and was augmented through in-class face-to-face discussion. Online teaching as the pre-class preparatory activity grounded the learners in the formal instruction of new grammatical concepts. The in-class time was then used by the teacher to induce learner-centered, meaningful interaction intended to render better comprehension and retention of the target grammar. The data collection instruments were College and Universities Classroom Environment Inventory (CUCEI) and a semi-structured interview. The results revealed that the participants receiving flipped learning instruction found it satisfactory, engaging, and effective. The findings add further evidence to the existing literature on flipped learning and have implications for curriculum development and pedagogy enhancement.

**Keywords:** conventional classroom; flipped classroom; sociocultural theory of learning; students' perception

### 1. Introduction

Technology as a mediational tool for foreign language instruction has come under spotlight since the 1960s (Blake, 2008; Warschauer & Healey, 1998). The use of technology is traced to

the behaviorist perspective and the utilization of computers (Warschauer & Healey, 1998). With the rejection of the behavioristic approach in the late 1970s and early 1980s and the emergence of the socio-cognitive view, which supported the instruction in an authentic environment, frequent use of technology in broader contexts was further proposed (Warschauer & Healey, 1998; Kalin, 2012). Flipped learning instruction, as a result of this enhancement of technology use in education, emerged in 2007 as two chemistry teachers, Jonathan Bergmann and Aaron Sams, started recording their class lectures and posted them online for the students in an attempt to help them find access to the new concepts that they occasionally missed learning. The success of the procedure motivated the two teachers to further make use of this strategy before their classes.

In a flipped classroom, the instruction is assigned to out-of-class knowledge delivery via video-based lectures and in-class knowledge application via interactivities. The out-of-class instructional videos familiarize learners with what they will be asked to do when they are assigned in-class collaborative or individual work to perform. A flip teacher tasks his/her learners with completing the designed assignments either by themselves or in groups in an attempt to trigger more engaged and independent learning. Thus, by blending technology for delivering new knowledge out of the class and working with the new concepts inside the class, the groundwork is laid for a more dynamic, interactive, and engaging learning environment compared to conventional classes (Chen Hsieh, Wu, & Marek, 2017). Adnan (2017) defined flipped learning as the reversal of the order of instruction by requiring students to perform preparatory work before attending the class and hence to free class time to be devoted to active learning activities and discussing the concepts at a deeper level.

Noteworthy, the success of a flipped classroom depends on gaining insight into what learners perceive concerning the teaching method. Learners' positive or negative perceptions coming from their experiences in flipped classrooms enable teachers to gain a deeper understanding about practices that are bound to be looked at (un)favorably. A user's intent in utilizing a technological tool is determined by what s/he perceives concerning the use of that particular technological tool and its ease-of-use (Davis, 1989). Gaining awareness of students' beliefs, expectations, objectives and their perception of learning strategies allows the instructors to shape meaningful and sensible learning for their students.

Although flipped learning has captured special attention, learners' perception of using flipped learning procedures is still in its infancy and the need for further researching the approach has been underscored by many scholars (Bishop & Verleger, 2013; Uzunboylu & Karagozlu, 2015; Betihavas et al., 2015; Gilboy et al., 2015). The flipped classroom

necessitates learners' autonomy and their commitment to pre-class preparatory work and in-class engagement with collaborative work. As opposed to second language learners who rely on their own independent learning, foreign language learners may not be fully able to detach themselves from their teacher when performing tasks. This makes them grow pre-accustomed to laid-back learning and rely on teachers' assistance rather than individually engage in problem-solving tasks (Wang, 2006). The practice also falls within the realm of the sociocultural theory (Vygotsky, 1978), which sees learners as self-adjusting their learning experiences through meaningful interaction and mediational tools as well as scaffolded feedback transpired in learners' Zone of Proximal Development (ZPD) (Lantolf & Throne, 2006).

In a flipped grammar classroom, situating the delivery of prerequisite knowledge out of classrooms through, for example, teacher-supplied video files, frees the in-class time for engagedly learning grammar and, thus, achieving higher language proficiency. Indeed, the utilization of instructional materials as an online activity augmented by in-class interactivities develop multiple situations by which a grammatical structure is better learned and retained. Relying on explicit learning via formal representation of new concepts cannot lead to effective use of grammar. Resultantly, grammar instruction should involve an online activity in an attempt to set up multiple situations through which further elucidation of a grammatical structure, like English conditional sentences, can take place. Therefore, inspired by the sociocultural theory, the present study aimed to examine Iranian EFL learners' perceptions of the incorporation of flipped classroom by addressing the following research questions:

1. How do Iranian intermediate EFL learners perceive social aspects of learning in flipped grammar classes?
2. Do Iranian intermediate EFL learners approve of flipped grammar classes?

## **2. Literature review**

Flipped learning is depicted to have brought into effect a unique evolution of instructional approaches. In flipped learning, two learning contributors, namely lecture and active learning, are combined but are transposed in order to render an out-of-class teaching and an in-class interactivity. The lecture transitioning the basic knowledge grounds learners in and demonstrates expertise to them. Unlike conventional classes, this knowledge transition does not crowd the one-on-one interactions out of the group learning space and the in-class time is used for one-on-one interactions or active learning, which is defined as the process during which teachers keep students involved in some activities that propel them into deliberating on

ideas and how those ideas are applied (Michael, 2006). When lecture delivery is designated as a pre-class activity, then the learning process is begun with students' output and this procedure dovetails with what Wen (2008) argues in her 'Output-driven/Input-enabled model', according to which teachers must start their class with students' output. Proceduralizing instruction as such, according to the advocates of active learning (e.g. Bonnell & Eison; 1991; Hung, 2015; Meyers & Jones, 1993), can initiate higher-order mental processes such as decision-making, critical thinking, engagement, problem-solving and processing and can enable students to actively tie what they already know with what they need to learn by activities such as class and peer discussions through scaffolded instruction (Wette, 2015). In scaffolded instruction, the teacher or a more proficient student enables other students to do what they cannot do unaided and this ties up with what Vygotsky's Zone of Proximal Development (ZPD) theory states.

Through flipped classroom, 1) a more dynamic and flexible learning setting is encouraged and teachers empower their students to apply the concepts; 2) students can self-pace their learning and teachers leave in-class time to earmark it for active learning; 3) more opportunities open up to enable students to deepen and broaden the acquired concepts; and 5) students are more engaged in the learning materials and activities (Bergmann and Sams, 2012; Berrett, 2012; Moravec et al., 2010). When a conventional grammar classroom is flipped, the learning setting can prompt learners to play an active role in learning processes and results in better comprehension and higher language proficiency.

## **2.1. Theoretical framework of flipped learning**

The study was conceptually structured around Vygotsky's (1978) socio-cultural theory. This framework examines how flipped learning promotes collaboration and effective utilization of classroom time, lending insight to see how students can surpass themselves and how they perceive flipped learning.

### **2.1.1. Sociocultural approach to learning**

The sociocultural approach to learning is a theory that puts learning down to the socialization and situations with which a learner comes into contact. Greeno (1996) defined the approach as "the knowledge which is distributed among people and their surrounding environments" (p.12). This signifies that the sociocultural approach considers learners' physical and social surrounding for knowledge construction. Whatever objects, artefacts, tools, books and communities with which individuals interact are viewed as surrounding environments (John-Steiner & Mahn, 1996).

Social interactions in language classrooms, involving the interaction between the teacher and learners, as well as amongst the learners, generate language construction and use (Greeno, 1996; John-Stiener & Mahn, 1996; Vygotsky, 1978). Social interactions in language classrooms come out well through learners' interactivities like collaborative learning which calls for negotiations and feedback. The engagement in a dialogue causes the occurrence of a two-way task which involves both input and output needed to notice and hypothesize the interlanguage which contributes to second language development (Egi, 2010).

### **2.1.2. The Zone of Proximal Development (ZPD)**

Learning does not take shape in vacuum or on one's own. The interaction essential to encourage learning is a pivotal factor to understand how effectively the sociocultural lens for learning works. This approach is well-supported by Vygotsky's (1978) concept of 'The Zone of Proximal Development', which highlights the role of a more competent other who offers support in a learning setting. The evaluation of progress involves the assistance that the learner is provided with by a more competent other to understand what goals a task pursues and how a task should come to a successful completion. The teacher should gradually disengage from the task and taper off the support so that the student can make progress and eventually bring the task to completion unaided. The flipped learning model has the teacher circulate around in the classroom to supervise students as they perform engaging activities and scaffold the learners who may flounder or misconceive a task (Gough, Grundmeyer, & Baron, 2015; O'Flaherty & Phillips, 2015).

### **2.1.3. Scaffolding**

Scaffolding is a conceptual tool that explains the way teachers can support their students in learning activities and entails evaluating, giving feedback, and tapering off support (Wood, Bruner, & Ross, 1976). Scaffolding sees the teacher constantly mentor and evaluate students' understanding and progress on a given task and ensures that their interest for completing the task does not wane. The mentor can simplify the task by decreasing the amount of needed information or task requirements that the learner needs in order to finish the task (Wood, Bruner, & Ross, 1976).

In flipped learning, video lectures are viewed as scaffolding tools by which teachers can synopsise contents and narrow down a given subject. To do so, videos should be short and concise so that the amount of information presented to the students is reduced (Bergmann & Sams, 2012). As mentioned previously, a flipped classroom gives learners the opportunity to

have near and constant presence of their teacher who mentors them in the task completion and this is what on which scaffolding focuses (Wood, Bruner, & Ross, 1976; Pea, 2004). Another way of scaffolding in flipped learning is the one which mediates the flow of received information where scrolling enables students to control the amount of the received information when they interact with the videos (Gough, Grundmeyer, & Baron, 2015; O'Flaherty & Phillips, 2015).

## **2.2. Empirical research on flipped learning**

Previous literature on student achievement indicates that flipped-taught learners outmatch their counterparts in conventional classrooms (Berrett, 2012; Huang & Hong, 2016; Leis, Cooke, & Tohei, 2015; Moraros, Islam, Yu, Banow, & Schindelka, 2015; Strayer, 2007, 2012; Warter & Dong, 2012). For example, flipping ninth-grade classes in Clintondale (MI) High School in 2010 reduced the failure rates by as much as 33 percentage points (Clintondale High School, 2013).

Moreover, students mainly appreciate this model of learning. Qualitative comments obtained out of studies denote that pre-watched videos and in-class peer-assisted problem solving make the most important contribution to students' approval with flipped courses (Bhagat et al., 2016; Schultz et al., 2014; Snyder et al., 2014; Clark, 2015). Flipped classroom learning atmosphere, having students self-pace, strategize and use their own learning techniques, culminates in an agreeable learning experience (Berrett, 2012). Such lessons, viewed as worthwhile and fruitful, cause the approach to be preferred over traditional lecture-based ones (Papadopoulos, Santiago-Roman, & Portela, 2010). In addition, the existing literature shows that flipped-taught students evince engagement which, according to Rutherford (2013), is derived from the fact that students' freedom and control over learning have risen.

Empowering students to take over their learning is another theme demonstrated in the literature. For example, Strayer (2012) surveyed the flipped- and conventionally-taught students to assess their perceptions of personalization, individualization, task orientation, innovation, student cohesion, collaboration, and equity of the learning atmosphere in actual and preferred learning environment. Students staked out the differences and the fact that conventional learning environment did not live up to their expectations. Regarding the effect of technology-mediated instruction on teacher and students' perception, the U.S. Department of Education (2010) conducted a meta-analysis and found that the use of technology brought

about significant improvement in reflection, comprehension, retention and perceptions of learning achievements. Thus, a mismatch between conventional classes and the way 21<sup>st</sup> century students learn and perceive success in the classrooms (Strayer, 2012) lend insight to the significance of taking account of student perceptions they hold about their learning experiences.

Although flipped learning has received increasing attention, learners' views on the approach need to be more rigorously studied (Bishop & Verleger, 2013; Uzunboylu & Karagozlu, 2015; Betihavas et al., 2015; Gilboy et al., 2015). In particular, the current literature points to the few published trails on the efficacy of flipped learning in EFL learners' communities (Soleimani, 2019). As a result, this scant literature necessitates more explorations regarding learners' perceptions and the efficacy of flipped classrooms to conclude if this approach is a breakthrough or a mere hype. The present study, motivated by such concerns, attempts to continue the line of research in this area in the EFL context of Iran.

### **3. Method**

#### **3.1. Participants**

Sixty Iranian intermediate EFL learners, studying English at a private language institute in Isfahan, Iran, were selected through convenience sampling to participate in the study. They were all male and ranged in age between 15 and 25. The participants were randomly assigned to a control and an experimental group, each composed of 30 members. The control and experiment groups were each further divided into two sub-groups in order to form two flipped classes and two conventional classes, each containing 15 participants.

#### **3.2. Instruments**

The following instruments were used in the present study.

##### **3.2.1. College and University Classroom Environment Inventory (CUCEI)**

To examine the participants' perception of the course and learning environment of flipped classroom, College and University Classroom Environment Inventory (CUCEI) was used. The internal consistency of the 49-item instrument had been confirmed by previous researchers (Cronbach's  $\alpha = .70$  to  $.90$ ; Fraser & Treagust, 1986; Strayer, 2012). To avoid any ambiguity and misunderstanding, the items were rendered into Persian, the participants' native



language. The face and construct validity of the questionnaire were also checked through expert judgment.

### **3.2.2. Semi-structured interview**

To triangulate the data, a 10-to-15-minute semi-structured interview followed the CUCEI questionnaire to elicit students' perceptions of flipped language instruction. The validity of the interview questions was checked by four PhD holders in TEFL.

### **3.3. Procedures**

Prior to the implementation of the flipped classroom, a pilot study was conducted to measure the reliability of the instruments. Then, the flipped grammar class, acting as the experimental group, received three sessions on conditional sentences which lasted for one and a half-hour each. The delivery of formal instruction of grammar through teacher-prepared videos was done. The videos, incorporating various instances of conditional forms, were uploaded the preceding day. The explanations of pre-, within-, and post-class activities are delineated below.

**Pre-class:** This stage, known as WOSQ (“Watching, Online discussing, Summarizing and Querying”), was used to help the teacher organize the teaching content and materials. It also enabled the researcher to effectively incentivize learners to watch the instructional videos, give feedback, text and share ideas and prepare for in-class discussions. To better understand the in-class knowledge contents, learners were engaged in preparatory pre-class work by watching the instructional videos, joining teacher-initiated online discussions, and writing a summary of what they learned at the end of the video which could be rewind, paused, and fast-forwarded to dispel any ambiguity, misunderstanding or difficulty. In addition to the summary, all learners were required to formulate three questions at the end of the video but were not allowed to confine themselves to just a ‘yes’ or ‘no’ answer. If the answer involved an initial yes/no, the learner was required to elaborate on the answer with an explanation.

**Within-class:** This phase had the learners practice during classroom hours. Having already received and watched a 5-10-minute online instruction, learners began with giving a summary of what they had acquired. Their summaries were followed by 20-minute teacher-led video-elicited questions about the uploaded online materials and remedial instruction. These questions, serving as a content review and recollection of the basic concepts of the lesson, paved the way for interactivity which took up the most in-class time. The flipped learning environment saw the teacher/researcher circulate around to monitor the learners' work and



clear up mistaken or hard-to-understand conceptions. The teacher masterminded and spearheaded learners' interaction and engagement in reciprocal interactive communications and group activities in order to apply the knowledge acquired from the video lectures. The 60-minute-spanned activities in the flipped-instructed classroom included resolving problems, working on projects, giving presentations, engaging in guided and independent practice, and taking quizzes.

**Post-class:** Drawing on what the in-class stage taught learners, learners were called on to develop a paragraph about themselves or other people and, particularly, ongoing issues. Then, they were required to upload their homework assignments so that their teacher and peers were able to feedback. The teacher either publically or individually explained to his learners some common problems whenever the need arose.

Following the three sessions of flipped learning, the participants who had not already experienced flipped classroom were given College and University Classroom Environment Inventory (CUCEI) to examine their perceptions of general issues in the flipped learning environment as well as teaching methodology. Moreover, the semi-structured interview was conducted with the participation of ten flipped-taught learners to express their perceptions of the effectiveness of flipped instruction qualitatively. The semi-structured interview sessions were audio-recorded for subsequent analysis.

Meanwhile, the instructor in the control group explained the target forms of conditional sentences through whiteboard and textbooks. Learners listened to the instructor's explanation and then did the grammar exercises in their textbooks. The instructor monitored students and provided them with feedback. In other words, no application of technology took place in the control group. In fact, the teacher attempted to direct the learners' attention to the conditional sentences both explicitly and implicitly in order to help them do the required tasks and take part in the classroom interaction and benefit from teacher and peer feedback. It should be noted that as opposed to the 60-minute time devoted to within-class activities in the experimental group (flipped classroom), the teacher in the control group had to lock himself mostly in lecture delivery and could only allot 20 minutes to within-class activities.

### **3.4. Data analysis**

For the analysis of the CUCEI, the chi-square test was applied to inferentially ascertain the significance of the frequency of the learners' responses to the questionnaire and examine their perceptions of the quality of teaching methodology and learning achievement in a flipped classroom. As with the qualitative data of interview, grounded theory methodology, including

coding the data and ascertaining the emergence of the main categories in the learners' responses, was applied in order to reach insightful results and verify the learners' responses to the questionnaire employed in this study.

#### 4. Results

The results of data analysis regarding the two research questions of the study are presented in below.

##### 4.1. Learners' perception of social aspects of learning in flipped grammar classes

The first purpose of this descriptive study was to examine the learners' perception of the classroom learning environment affected by flipped grammar instruction. In doing so, College and University Classroom Environment Inventory (CUCEI) was used to investigate the effect of flipped learning environment on the students' engagement in the class and explore their perceptions in this regard. The CUCEI involves seven categories aimed at distinguishing the learners' satisfaction of the target learning environment. The seven items include personalization, involvement, student cohesiveness, satisfaction, task orientation, innovation, and individualization (Strayer, 2007, 2012). The description of each scale is provided in the Table 1.

Table 1. CUCEI item description

Item name	Description
personalization	The opportunities individual students have to interact with the instructor and the concern for students' personal welfare
involvement	How much students participate actively and attentively in class discussions and activities
student cohesiveness	Extent to which students know, help, and are friendly toward each other
satisfaction	How much students enjoy their classes
task orientation	Extent to which class activities are clear and well-organized
innovation	How often new and different teaching and learning activities are used
individualization	Extent to which students are allowed to make decisions and are treated differently

The descriptive statistics for CUCEI results are presented in Table 2.

Table 2. Descriptive statistics of the CUCEI

	N	Min.	Max.	Mean	Standard Deviation	Variance	Skewness	Kurtosis
1 personalization	30	3.10	3.70	3.41	0.188	0.035	0.076	-1.492
2 involvement	30	3.80	4.17	3.98	0.355	0.126	0.541	0.795
3 student cohesiveness	30	3.44	3.78	3.61	.097	0.009	0.981	0.696
4 satisfaction	30	3.98	4.00	3.99	.0154	0.024	0.024	-0.293
5 task orientation	30	3.33	3.70	3.51	0.107	0.011	0.011	0.309
6 innovation	30	3.24	3.22	3.21	0.012	0.021	0.032	0.221
7 individualization	30	3.50	3.85	3.67	0.135	0.101	0.010	0.124

Descriptive data in Table 2 reveals that the most mean score ( $M=3.98$ ) was devoted to the learners' satisfaction of the flipped instruction, while the category of innovation had the least mean score ( $M=3.21$ ). It seems that learners were satisfied with the learning environment of the flipped instruction in learning conditional sentences. In fact, learners' perceptions of the learning environment lie in their satisfaction of the flipped instruction in the learning of conditional sentences. In order to inferentially identify the significance of difference among the categories, normal distribution of learners' responses should be checked as in Table 3. For normality check, Kolmogorov Smirnov Test was used.

Table 3. Normal distribution of learners' responses to CUCEI items

	Statistics	Df	sig
1 personalization	0.218	30	0.020
2 involvement	0.355	30	0.000
3 student cohesiveness	0.326	30	0.030
4 satisfaction	0.362	30	0.000
5 task orientation	0.201	30	0.010
6 innovation	0.342	30	0.010
7 individualization	0.344	30	0.000

In order for the data to be normally distributed, p values should be more than .05. As to Table 3, it is inferred that p values are less than .05, which violates normal distribution of data, thus, leading to the application of non-parametric test to inferentially analyze the CUCEI. Hence, non-parametric Chi-Square Test was applied (see Table 4).

Table 4. Chi-square results for the difference among the CUCEI categories

	Flipped	Df	Chi-Square
	Mean		Sig. (2-tailed)
1 personalization	3.41	30	.003
2 involvement	3.98	30	.000
3 student cohesiveness	3.61	30	.001
4 satisfaction	3.99	30	.000
5 task orientation	3.51	30	.020
6 innovation	3.21	30	.051
7 individualization	3.67	30	.001

Table 4 shows that there was a significant difference among the different categories of the learners' perceptions of the flipped learning environment. It can be inferred that significant difference was observed in the learners' satisfaction of the flipped learning environment ( $p=.000<.05$ ) in comparison with the innovation category ( $p=.051>.05$ ). It should also be noted that learners' perception regarding their involvement ( $p=.000<.05$ ) and individualization ( $p=.001<.05$ ) in the flipped-taught classroom learning environment was found to be significant.

#### 4.2. Learners' approval of flipped grammar classes

The purpose of the second research question of the study was to explore the learners' approval of flipped learning compared to conventional classroom. For doing so, the grounded theory was applied to find the categories emerging in the learners' interview data. As regards the positive perception emerging out of the flipped classroom, the participants' perceptions can be categorized as 1) quality of grammar learning through flipped instruction and 2) learners' high motivation in flipped grammar instruction. The explanations of each category is provided in

the following and the learners' extracts of interview data are also presented to verify the categorization of learners' perceptions.

### **Quality of grammar learning through flipped instruction**

The interview revealed that learners were satisfied with the flipped instruction since it paved the way to improve their learning and retention of conditional sentences. In fact, they held positive perceptions of the quality of grammar learning when they were exposed to flipped instruction. It appears that the flipped classroom made the learners aware of the use of conditional sentences practically. The interviewees indicated that they liked watching grammar videos at home since it prepared them for class. They could access the videos at any time. In this way, it helped them to form the basic knowledge about each grammatical rule before class. They also focused on the intensive practice of different types of in-class exercises. They liked it because it helped them evaluate their understanding of the grammatical rules. Moreover, the immediate feedback they used to get helped them understand the use, meaning, and function of different grammatical rules. There was a high level of motivation and participation during tasks which led to more learning. The extract below demonstrates the learner's satisfaction with the quality grammar learning achieved by flipped instruction.

Extract 1.

*I think that in our classroom everything was perfect. When we were working on WhatsApp and when we were discussing and feedbacking on the grammar tasks in the classroom. In my opinion, there was no extra activity to make the students boring. Conditional sentences, we could use them in the sentence and make a lot of sentences...it is very nice when learning grammar is in this way.*

### **Learners' high motivation in flipped grammar instruction**

Since flipped classroom has been a rather different and new environment in interactive grammar learning, the learners' interview demonstrated their motivation in having more activities in such a learning environment. In fact, when a learning environment creates positive energy among the learners to play an active role in learning the target language skill, not only the learning process is facilitative, but it is also motivating for learners, which brings about a sort of competition among the learners in the classroom while learning the grammatical forms or any other language skill or sub-skill. Students indicated that they felt more motivated to participate in different grammatical tasks and more confident about their ability to answer grammatical questions. They also liked writing questions about the content of the videos because it helped them focus on the meaning of these rules. As *WhatsApp* and its mixture with

classroom setting have resulted in the learners' improvement in grammar learning, it seems that learners could self-regulate their own learning behaviors under the teacher's monitoring, which made learners to be highly motivated in learning conditional sentences. Moreover, they attributed their progress to the variety and significance of grammatical tasks and group work that caused them to engage in the tasks and better understand the meaning of different grammatical points. The following extract is a piece of evidence for such motivation.

Extract 2.

*I really like the time when teacher uses WhatsApp in teaching. You know... because this app is used in our daily communications, it is really interesting when we use in learning English. I really enjoy it. This causes me to be more active in discussions and it also help those students who are a little shy.*

To summarize, Iranian intermediate EFL learners' perceptions of flipped instruction lay in their reliance on the effective role of flipped teaching in creating an interactive learning environment for the learners to overcome their difficulties in learning. Analysis of the learners' responses to the questionnaire highlighted their satisfaction of the flipped learning environment and interactive involvement in such an environment with the teacher as well as the peers. The qualitative data obtained from the interviews also affirmed a positive picture of students' perception of flipped learning. Learners' interview revealed the learners' emphasis on the quality learning and their high motivation through exposure to flipped grammar instruction. The interview responses indicated the importance of videos, and pair and group work that helped students to learn in a fun and motivating environment. In addition, students' beliefs about the nature of grammar and its importance in communication changed as the focus was on the discussion of meaning of grammatical rules and their functions.

## **5. Discussion**

The present study was conducted to qualitatively and quantitatively bridge the existing gaps in the literature concerning the efficacy of flipped instruction on the learners' perceptions of their grammar learning in the foreign language context. Data gathered from the CUCEI and interviews revealed that the flipped classroom apparently resulted in increasing the learners' satisfaction of the learning environment shaped through *WhatsApp* and face to face classroom since the learners strongly concurred that flipped classroom was productive enough to help them improve their knowledge of conditional tasks.

The findings support those of Freeman et al. (2014), who concluded that students improve when student-centered approaches like flipped learning are used. Additionally, the findings are in line with those obtained by McGivney-Burelle and Xue (2013), who reported that students can avail themselves of more opportunities to engage in purposeful activities. The positive impact of flipped teaching can be ascribed to the nature of the flipped classroom which induces more interaction and feedback between the teacher and learners. Thanks to its student-centeredness, flipped learning has the potential to make learners reflect on their learning behaviors and to consciously engage in target language tasks (Alsowat, 2016). The findings also corroborate those of Fulton (2012), who maintained that flipped learning can offer a thought-provoking learning setting in which learners can perform the learning tasks in a more creative manner, as well as those of Musallam (2010), who supported flipped learning and its role in providing language learners with a rich learning setting in which they can cooperatively do a part in a learning environment. Noteworthy, as stated by Amiryousefi (2017), watching videos at home can generate a non-threatening atmosphere which helps learners construct and increase their knowledge while eliminating psychological barriers.

Similarly, the interview findings, revealing that learners believed in the occurrence of quality learning as created by the flipped classroom, were aligned with research studies done by Clark (2015) and Sezer (2010), encouraging teachers to take advantage of incorporating technology into face to face learning and simultaneously achieving the learners' success in doing the target language tasks. Learners' high motivation in the flipped learning environment was also uncovered among their interviews, confirming the fact that learners' grammar learning and their successful interaction with their peers and the teacher, which took place through the flipped learning, could positively affect learners' perceptions of the use of flipped learning (Strayer, 2007, 2012).

The finding that the learners in the present research appreciated the flipped classroom compared to a conventional classroom, which seemed to be far from interaction-based grammar learning, can be attributed to the fact that flipped-taught learners were not merely exposed to linguistic rules providing little-to-no chance for cooperative learning classroom. In fact, as argued by Bergmann and Sams (2012) and Berrett (2012), students buy into flipped classroom as students in this study wholeheartedly expressed their satisfaction of the flipped classroom using productive technologies, like *WhatsApp*, to gain mastery over grammar tasks. By providing an interactive learning atmosphere, learners could own the conditional tasks since they benefitted from teacher and peer support, which is in alignment with Bergmann and



Sams (2013) and Rutherford (2013), who strongly insisted on the positive application of flipped instruction in bringing about cooperative learning.

Last but not least, qualitative analysis of the interview data mirrored the findings of CUCEI. In fact, it was found that flipped learning could lead to learners' satisfaction with the learning environment. More importantly, the learners' involvement and cohesiveness were found to be significantly highlighted in the questionnaire. This provides another convincing evidence regarding the beneficial employment of flipped instruction in EFL and ESL classes since learners are seemingly exposed to an interactive learning environment (Bhagat et al., 2016; Schultz et al., 2014), assisting them to be consciously involved in the provided tasks and consequently self-regulate their learning behaviors (Vygotsky, 1978).

## 6. Conclusion

In sum, the present study was an attempt to direct the teachers' attention, particularly the EFL ones, toward possible advantages of flipped instruction in paving the way for themselves as facilitators, and their learners as the receivers, to feel independent in the classroom and enjoy the spontaneous interaction that occurs during the flipped learning model, which results in the 'possession' of the classroom by both parties. Giving language learners a chance to use videos brings about motivation and individual attention that students need to enhance their grammatical performance. In addition, self-learning enables language learners to further tap into peer-assisted learning, student-teacher interaction, and taper off their dependency on the teacher. This study necessitates more teacher education research to hold various pedagogic programs to raise teachers' awareness of quality teaching and learning through flipped instruction and probably other technology-related instructional approaches.

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