

The Flipped Classroom Impact in Grammar Class on EFL Saudi Secondary School Students' Performances and Attitudes

Sarah S. Al-Harbi¹ & Yousif A. Alshumaimeri¹

¹ Curriculum and Instruction Department, King Saud University, Riyadh, Saudi Arabia

Correspondence: Sarah S. Al-Harbi, Curriculum and Instruction Department, King Saud University, Riyadh, Saudi Arabia. E-mail: saraharbi2014harbi@gmail.com

Received: July 3, 2016 Accepted: August 28, 2016 Online Published: August 30, 2016

doi: 10.5539/elt.v9n10p60 URL: <http://dx.doi.org/10.5539/elt.v9n10p60>

Abstract

The aim of this study was to apply the flipped classroom strategy in teaching English grammar to examine its impact on secondary school students' performances, perceptions, and attitudes toward learning English independently. The researcher implemented the flipped classroom strategy by selecting videos based on the students' textbook and uploading those videos on the Edmodo site before each lesson to provide opportunities for active learning interactions. The students of the experimental group (n = 20) were required to watch the videos to learn by themselves and to come to class prepared to ask for clarification, if needed. They also practiced what they had learned under the teacher's supervision by completing collaborative and competitive tasks in groups or pairs. Meanwhile, the control group students (n = 23) received in-class only traditional teaching. They learned the grammatical lessons without the help of any videos. The statistical analysis of the post-test results showed that adopting the flipped classroom strategy appeared to play a role in enhancing the students' grammar performances, as the mean score of the experimental group was higher than that of the control group, but this difference was not statistically significant. The students' responses to a questionnaire and semi-structured interviews indicated that their attitudes' towards using the flipped classroom strategy in the EFL class were positive.

Keywords: English as a foreign language, flipped classroom, Saudi secondary schools, students' performances and attitudes

1. Introduction

1.1 Background

In Saudi Arabia, English as a Foreign Language (EFL) is a compulsory subject in schools, universities, industrial, and governmental institutions (Al-Seghayer, 2015). Several studies indicate that Saudi high school students demonstrate low level abilities in all of the four language skill areas: reading, writing, speaking, listening (Al-Hamlan & Baniabdelrahman, 2015; Fareh, 2010). Researchers have shown that Saudi students are very limited in their ability to communicate in English and are exposed to little English language use (Al-Hamlan, 2013; Rahman & Alhaisoni, 2013). In addition, Alresheed, Leask, and Raiker (2015) stated that the most urgent issue in Saudi EFL education is to improve students' communication skills. Therefore, the Saudi Ministry of Education has proposed technology as a solution to support language learning (Alresheed, et al., 2015). Some Saudi Arabian studies have shown that including technology to promote self-learning skills and to expand students' exposure to the target language has a remarkable effect on students' English proficiency levels and attitudes towards learning English (Al-Kathiri, 2015; Al-Okaily, 2013; Al-Shehri, 2011). However, one promising approach that uses technology in teaching, the flipped classroom strategy, had not yet been studied in the EFL Saudi Arabian context.

The flipped classroom strategy is a pedagogical model in which lesson content is learned at home by means of technology, allowing teachers to devote class time to practicing lesson content with exercises, activities, discussions, or projects (Educause Learning Initiative, 2012). The flipped classroom radically changed the traditional concept of teaching and learning by shifting how the teacher is teaching and the learners are learning. Giving students control over their learning is the revolutionary idea behind the flipped classroom strategy. In the EFL context, the flipped classroom strategy can help solve common problems of English language learners, such as lack of participation, communication, interaction opportunities, lack of sufficient feedback, and low

proficiency levels (Basal, 2015; Hung, 2015; Obari & Lambacher, 2015; Sung, 2015). While the flipped classroom strategy has shown success elsewhere, it had never been tried in the context of Saudi culture and the Saudi education system. Therefore, this study was conducted to evaluate the impact of the flipped classroom strategy on Saudi secondary school students' grammar performances as well as their attitudes toward self-study in English classes. This study aimed to determine whether the flipped classroom strategy can solve one of the urgent issues of EFL training in Saudi Arabia: the limited opportunities students have for interaction, participation, and practice of English during regular classes.

1.2 Statement of the Problem

Although the flipped classroom strategy applied to EFL learning has had a positive impact on the EFL learners' attitudes, engagement, participation, and performances, this strategy had not yet been examined in the Saudi EFL context. Several studies indicated that Saudi EFL learners do not have the opportunities to engage in English language use or practice the EFL skills outside of the classroom, largely due to two reasons. The first reason is the passive role many learners adopt as the most used teaching methodologies are grammar-translation and audio-lingual methods (Alrabai, 2016). Fareh (2010) and Rahman and Alhaisoni (2013) stated that most EFL Saudi classes are teacher-led because the main teaching method is lecturing, making the textbook and the teacher the only sources of knowledge. This has created passive and unmotivated learners and reduced students' chances to naturally acquire the language. This passive role in learning disappears in the flipped classes because the strategy motivates students to spend more of out-of-class time to learn by themselves (Han, 2015) and encourages them to participate more in classroom activities (Hung, 2015). The second reason for the limited practice opportunities in Saudi EFL classes is the nature of the curriculum. The curriculum does not encourage learners to take a role in the learning process since learner-centered approaches are not implemented in Saudi EFL contexts (Alrabai, 2016). Al-Hamlan (2013) found that the textbook used for secondary students does not encourage practicing the language in pairs and groups. In addition, Baniabelrahman and Alhamlan (2015) found that Saudi EFL learners' primary goal in learning the language is to use it outside the classroom, but the curriculum is not helping them to achieve their goal. Therefore, the researchers chose to implement the flipped classroom to examine its impact on students' performances and attitudes, as they are hoping to address the previously mentioned needs.

2. Review of Literature

To lay the foundation for this study, a review of key literature areas was conducted, evaluating the challenges and problems of EFL learning in Saudi Arabia and attempts to use technology in Saudi EFL courses. Additionally, the theory behind the flipped classroom approach was investigated and presented along with its application in the EFL field.

2.1 Overview and Issues of the Saudi EFL Context

English as a foreign language (EFL) is one of the essential and required subjects in all types of Saudi educational institutions (Al-Seghayer, 2015). The Ministry of Education has devoted time and effort to developing the EFL curriculum in their efforts to achieve the desired learning outcomes. Despite the demonstrated efforts of the Ministry of Education, there are some serious unresolved problems regarding students, teachers, and curriculum. Studies show a lack of communication practice is a primary cause of the students' low proficiency levels in speaking (Al-Hamlan, 2013; Al-Seghayer, 2015). Al-Hamlan and Baniabdelrahman (2015) found that Saudi EFL secondary school students need more opportunities and support to practice English language in class, especially to develop listening and speaking skills. This issue is clearly seen in grammar classes. Grammar is often traditionally taught and practiced in isolation from communication skills (Assalahi, 2013). Thus, Saudi EFL learners reported that although they learn a lot of grammar, it is difficult to use grammar correctly (Al-Hamlan & Baniabdelrahman, 2015).

Some of these shortcomings may be due to the traditional methods used in English classes, which make learners passive receivers of the knowledge and teachers' knowledge providers and presenters (Al-Seghayer, 2015; Rahman & Alhaisoni, 2013). In fact, Alrabai (2016) asserts that in Saudi Arabia "a controlling, aggressive teacher is an external factor that negatively affects learners' motivations, while the anxiety that such teachers instill in their students is an internal factor that negatively affects students' learning outcomes (p. 22). The teacher-centered approach to classes is a major factor in students not developing their English skills (Alrabai, 2016). Students' sociocultural paradigms can be another obstacle that prevents learners from practicing English. Saudi learners do not need to use English in their daily activities since Arabic language is the language of communication. This causes the lack of out-of-class authentic situations to use English in Saudi Arabia (Alrabai, 2016).

In addition, “the teaching curriculum is not usually based on learners’ goals, needs, and desires; rather, it is prescribed by university policymakers” (Alrabai, 2016, p. 25). Most students need to have various resources to learn from besides the textbook. Studies show students prefer technology based teaching methods and that utilizing technology in teaching and learning English has a positive effect in the Saudi Arabian context (Al-Hamlan, 2013; Al-Hamlan & Baniabdelrahman, 2015; Al-Kathiri, 2015; Alshumaimri & Almasri, 2012; Al-Qasim & Al-Fadda, 2013). Al-Hamlan and Baniabdelrahman (2015) and Rahman and Alhaisoni (2013) suggested including technology in the teaching and learning of EFL would provide learners with more exposure to the target language in native-like contexts, thus improving their proficiency levels in the target language. In addition, Alrabai (2016) noted the need to modify the curriculum to incorporate teaching and learning methods that promote learners’ autonomy and increase learners’ opportunities to practice the language in class and daily life is another proposed solution.

2.2 Overview of the Flipped Classroom Strategy

The flipped classroom approach was started in 2006 in Colorado, and the strategy basically refers to the idea that the lectures and explanations would no longer be done in class but at home, leaving what was previously treated as homework to be done in the class time (Bergman & Sams, 2012). Although asking students to prepare before class time is not a new idea, the flipped classroom is special for two reasons: first, because it uses video as a pre-teaching tool, and teachers are able to record or create video content and share it with their students to help them learn independently. Second, the flipped classroom established the framework to effectively personalize learning to confirm that every student is capable of learning anything when giving the right support. This strategy changes the view of the classroom from being a knowledge station to being a place for student engagement and formative assessment of students’ progress (Kang, 2015).

Studies that have demonstrated the efficacy of the flipped classroom strategy include Clintondale high school experience (Flumerfelt & Green, 2013). The result of adopting the flipped classroom strategy in this low-rated school was dramatic improvement in learning outcomes. In English subjects, for example, the percentage went from 52% failing students to 19% (Flumerfelt & Green, 2013). Benefits to implementing the flipped classroom strategy include students learning at their own pace, reinforcing the teacher-student relationship (Bergmann & Sam, 2012), and allowing teachers to personalize and individualize learning (Basal, 2015; Kang, 2015). On the other hand, there are some challenges that accompany the implementation of the flipped classroom strategy such as students having difficulty adjusting to being active learners or neglecting to do the out-of-class work (Borman, 2014; DewiSuryani, 2014; Huelskamp, 2015). Another challenge is teachers not being willing or capable of changing and adopting the use of technology (Educause Learning Initiative, 2012). However, if the flipped classroom strategy was implemented well, and students and teachers received appropriate support, resistance would not last for long (Hamdan & McKnight, 2013; Ishikawa et al, 2015; Strayer, 2012). Furthermore, Hamdan and McKnight (2013), Ishikawa et al. (2015), and Strayer (2012) showed that if the flipped classroom strategy was well implemented, and students and teachers received appropriate support, challenges could be overcome.

2.3 Impact of the Flipped Classroom Strategy on Learning English

Studies suggest the flipped classroom strategy positively affects students’ performance and proficiency levels in various areas of English language. Hung (2015) found that implementing the flipped classroom model in English classes develops students’ academic performance in general. In addition, Ishikawa et al. (2015) and Obari and Lambacher (2015) found that flipping English classes improves students’ scores on the Test of English for International Communication (TOEIC). In addition, flipping English classes improves students’ speaking skills (DewiSuryani, 2014; Obari & Lambacher, 2015) and reinforces students’ listening comprehension (Han, 2015; Hung, 2015; Kang, 2015). Even in studies where the flipped classroom was utilized to promote other areas of English language, such as students’ grammar, vocabulary, and idiomatic knowledge, the results show that students’ confidence, and oral fluency skills also improved (Han, 2015; Hsieh, Wu, & Marek, 2016; Kang, 2015). Furthermore, the flipped classroom strategy can encourage learners and make them more attentive to the learning process. Hung (2015) confirmed that 80% of the participants in the flipped classes spent more time and effort learning on their own compared to students’ in the traditional classes, which indicated that they participated more in the learning process. Similarly, Han (2015) noted that during the study, students independently devoted time and effort to finding the technological learning tools and resources they needed to expose themselves to English for their ungraded project, showing motivation and interest in English learning.

2.4 Attitudes and Perceptions towards the Flipped Classroom Strategy in English Classes

Students have varied perceptions and attitudes towards the flipped classroom strategy. Students confirmed that flipping their learning enabled them to better comprehend the content (Homma, 2015); whereas, some students

complained about the out of class assignments that require using technology (Han, 2015; Kang, 2015). On the whole, attitudes and perceptions of the flipped classroom are positive. Students evaluate the flipped classroom strategy as highly satisfactory since coming to class prepared increased students' self-confidence and participation (Basal, 2015; Hsieh, Wu, & Marek, 2016; Kang, 2015). In addition, availability and accessibility of varied e-learning materials and online resources positively influenced students' attitudes (Ishikawa et al., 2015; Obari & Lambacher, 2015). Kostka and Brinks Lockwood (2015) found students reported that flipping English classes made learning more productive, fruitful, and engaging. Furthermore, it is very useful to assign a short online quiz or ask students to complete a worksheet after reviewing out of the class materials to keep track of students' progress (Kang, 2015; Kostka & Brinks Lockwood, 2015). Another feature of flipped classrooms that received a positive response is the incorporation of e-communication tools outside the classroom because students can share their work and get comments and feedback from their classmates and the teacher (Haake, 2013; Han, 2015; Hsieh et al., 2016). Furthermore, students report that utilizing online communication tools reduced their anxiety since it freed them from pressure of an immediate reply, and that they can consider their answers and comments before sending them.

2.5 Technology in Teaching EFL in Saudi Arabia

In today's world, technology is an essential element in any educational context. In English language learning and teaching, technology has positively influenced teachers' and students' practices and resolved some problems. In Saudi Arabia, EFL studies have proven that both teachers and students show positive readiness and attitudes towards implementing technology in EFL classes, despite facing some challenges (Al-Furaydi, 2013; Al-Kathir, 2015; Alresheed et al., 2015; Alshumaimeri, 2008). Several studies in Saudi Arabia have used technology to enhance EFL learning. Al-Furaydi (2013) evaluated Saudi Arabian teachers' opinions regarding using technology in learning English. Teachers reported that the students became more interested and learn better when they used short movies and PowerPoint slides. Studies by Al-Kathiri (2015) and Aljumah (2012) showed students benefitted from the use of technology in learning English. In addition, Al-Qasim and Al-Fadda (2013) found using technology (audio podcasts) as independent learning tasks outside the classroom improved students listening and speaking skills and made the students autonomous learners and more confident in EFL classes as well. Alshumaimeri and Almasri (2012) conducted a quasi-experimental study to investigate the effect of integrating WebQuest into the traditional teaching methods for improving reading skills and found that the reading comprehension performance improved significantly. Regarding the impact of technology on learning L2 grammar, Al-Jarf (2005) carried out a study to investigate the effectiveness of online grammar instruction on proficiency of EFL college students' at King Saud University. This method improved grammar knowledge and increased self-confidence and motivation. These existing successful results of using other technological approaches in Saudi higher education give reason to believe that it is possible to successfully use the flipped classroom strategy in teaching Saudi secondary school students.

2.6 The Flipped Classroom in Saudi Education

Although the flipped classroom is one of the suggested alternatives to the current teacher-centered method in EFL Saudi education, it had not been researched before in Saudi English language classes. Flipped classrooms had only been researched in a few educational fields in Saudi Arabia by AlRowais (2014), Al-Otaibi (2016), Al-Harbi (2015), and Al-Zahrani (2015). AlRowais (2014) and Alharbi (2015) adopted the flipped classroom strategy in different fields of higher education to evaluate its effect on learners' performances. The findings of both studies were positive. In addition, Al-Zahrani (2015) conducted a study on higher education students and found that students experienced some difficulties while adopting the flipped classroom strategy because of the limited preparation for the strategy, the flipped classroom promoted students' creative thinking. To consider Saudi teachers' perceptions of the flipped classroom strategy, Al-Otaibi (2016) investigated 86 Saudi science teachers and reported that implementing the flipped classroom in teaching science was valuable despite technological problems and students' resistance. While most of these studies have taken place in a different field of Saudi education, a gap had been left in evaluating the flipped classroom in the EFL context.

2.7 Research Questions

The following research questions were answered in this study:

- 1) As a result of implementing the flipped classroom strategy, were there any significant differences between the experimental and control groups' improvement in relation to English grammar?
- 2) What were Saudi secondary school students' perceptions and attitudes towards implementing the flipped classroom in learning English as a foreign language?

3) What were Saudi secondary school students' suggestions and recommendations about applying the flipped classroom strategy?

3. Methodology and Data Collection

3.1 Research Method

This study had a nonequivalent, post-test only quasi-experimental research design. This study used a convenience sample of two non-equivalent but comparable classrooms. The participants had previously been divided into these two classes, making random selection impossible and rendering this a quasi-experimental design (Gribbons & Herman, 1997). During the study, one of the classes, which formed the control group, studied English grammar using traditional teaching strategies. The other class, which was the experimental group, learned English grammar through the flipped classroom strategy. To compare proficiency levels between the groups, a placement test was administered to both groups before the experiment and a post-test was administered after the experimental treatment. In addition, a quantitative and qualitative questionnaire and a semi-structured interview were utilized at the end of the experiment to evaluate the experimental group students' opinions and attitudes towards the implementation of the flipped classroom.

3.2 Participants

This study was conducted on 43 female English as a Foreign Language learners in Riyadh, Saudi Arabia. The participants were private school students who were in their second year of secondary school. The study used a convenience sample of participants. The researcher selected this sample in particular because the students were already familiar with Edmodo; therefore, the participants did not need preparation regarding the use of this platform. In addition, the teacher was also familiar with flipped classroom strategy and had recently taken a training course in this methodology.

There were 20 students in the experimental group and 23 students in the control group. Both groups were taught by the same teacher and used the same syllabus and textbook, which was *Traveller 4*. The participants were 16-17 years old. In addition, a placement test was completed by the control and experimental groups to evaluate if both groups had similar proficiency levels in English grammar. The results of this placement test did not show significant differences between the experimental and the control groups in regards to their levels in English grammar (see Table 1).

Table 1. T-test results for the groups' equivalence

Groups	N	Mean	Std. Deviation	Std. Error Mean	t Value	Sig. (2-tailed)
Control	23	34.17	4.979	1.038		
Experimental	20	34.2	4.708	1.053	-0.018	0.986

The Independent Sample T-test indicated that there was not a significant difference between the control (M = 34.17, SD= 4.98) and the experimental (M = 34.20, SD = 4.71) groups' scores, $t(41) = .018$, $p = .986$.

The sample was assumed to be normally distributed since the skewness and kurtosis z-values results were within -1.96 and + 1.96 for both groups.

3.3 Procedure

At the beginning of the experiment, a placement test designed by Macmillan publishers was completed by the experimental and control groups to determine whether there were significant differences between them regarding their proficiency levels in L2 grammar.

During the implementation of the research process, the experimental and control groups studied the same nine grammatical topics. These topics were the use of time clauses, conditional sentences types 1 and 2, modals for expressing necessity and needs, modals for expressing possibilities, modals for making deductions, gerunds, infinitives, and tag questions. These topics were drawn from the grammar lessons in the students' textbook: *Traveller 4*.

The following procedure was used with the experimental group: the researcher selected videos on topics corresponding to the nine areas. These videos were selected from the YouTube website and sent to the teacher to check the videos' appropriateness for the students' levels and topics. Three days prior to each lesson, the teacher uploaded the corresponding video as a link to Edmodo so that the students could watch them on their own time

outside of school hours. On Edmodo site, the students were able to comment on the video and post questions for the teacher.

The teacher discussed the videos with the students at the beginning of each class so that the teacher could figure out whether all students had watched the video or not. During the discussion, the teacher clarified any misunderstood points and answered the students' questions. Afterwards, a collaborative activity or a game was assigned to students to do in groups, pairs, or individually (See Appendix A). The students were asked to complete the textbook exercises in groups and exchange their books for peer-correction. In the cases where the group members found mistakes, they had to correct the mistakes and explain their corrections. While learners were performing the tasks, the teacher walked around the class to observe them and provide feedback. In the control group class, the teacher taught the grammatical lessons without the help of any videos. After a lecture explaining the grammar, the teacher asked the students to do one of the textbook activities to check their understanding, then solve another exercise in groups or individually. Unlike in the experimental class, the grammar explanations took up class time in the control class, so the teacher had to assign some of the exercises as homework, since there was not enough class time to do all of the exercises in class. The experiment lasted for a total of seven class periods (45 minutes) and a duration of six weeks. Every week, the students learned one of the grammar lessons. However, the fourth week-lesson, which was about models for expressing possibilities and models for making deductions, was divided into two periods due to the difficulty of the grammar rules and the length of the assigned exercises. After the experiment, the students completed a posttest to evaluate if the flipped classroom strategy had impacted the experimental group's proficiency level regarding these grammar topics. The proficiency levels of the control group that used only the traditional textbook strategies and activities were compared with the proficiency levels of the experimental group who used the flipped classroom strategies.

3.4 Instruments

3.4.1 Tests

Placement test

The placement test consisted of 40 multiple choice items designed by Macmillan publishers, which is one of the recognized publishers of EFL textbooks (see Appendix B). It was used to ensure that the experimental and control group students had similar proficiency levels in grammar.

Post-test

The post-test, which consisted of 42 items, was designed by the researcher to determine whether the flipped classroom strategy had a positive impact on students' performance in L2 grammar (See Appendix C). The post-test was administered to the experimental and control groups after the experiment, which lasted for eight weeks.

3.4.2 Questionnaire

The quantitative and qualitative questionnaire was used to evaluate the students' perceptions of the flipped classroom strategy. The questionnaire was previously used by Johnson and Renner (2012) to measure students' perception towards the implementation of the flipped classroom. The quantitative part was composed of 11 close-ended items, which were scored using a 5-point Likert scale (strongly agree - agree - neutral - disagree - strongly disagree). The qualitative section was composed of one semi-closed question and two open-ended questions. The questionnaire aimed at exploring the students' perceptions of the availability of communication and collaboration in the flipped classroom community and the accessibility and availability of online course materials, as well as their attitudes towards the flipped classroom strategy. Overall, the questionnaire sought to determine if the attitudes were positive or negative and to gather any relevant information on how students perceived these activities (see Appendix D).

3.4.3 Semi-Structured Interview

A semi-structured interview was utilized to gather additional qualitative insight into students' perceptions, opinions, and attitudes towards the flipped classroom. The interview consisted of three questions. The researcher conducted five case study interviews with students from the experimental group. The interviews were in Arabic and the bilingual researcher translated the interview into English, analyzing the students' responses qualitatively.

3.5 Validity and Reliability

3.5.1 The Post-Test Validity and Reliability

The prepared post-test was given to two experienced teachers who were using the *Traveller 4* textbook, which is the book the students were studying, to check the test for content validity. To determine the reliability of the

post-test, a split-half reliability test was used. The post-test was designed with parallel structure in order to be able to conduct the split-half reliability test. It was reliable at 0.915 Spearman-Brown Coefficient.

3.5.2 The Questionnaire Validity and Reliability

The questionnaire was provided to 13 EFL secondary school students to check its clarity and determine its reliability. It was reliable at 0.911 Cronbach's Alpha. To evaluate the questionnaire content validity, the questionnaire was reviewed by three experts who contributed their recommendations for improving the content validity of the questionnaire.

3.6 Data Analysis

The placement test and the post-test scores were collected manually and analyzed by SPSS program. A parametric test, which was the Independent Samples T-test, was used to compare between the results of the control and experimental group. The Independent Samples T-test was used since the groups were normally distributed.

The sample was assumed to be normally distributed since the skewedness and kurtosis z-values results were within -1.96 and $+1.96$ for both groups. The skewedness is -0.382 (Std. Error = 0.481) and the kurtosis is -1.272 (Std. Error = 0.935) for the control group and the skewedness is -0.861 (Std. Error = 0.512) and the kurtosis is -0.639 (Std. Error = 0.992) for the experimental group.

The questionnaire results were collected manually and analyzed by SPSS and Excel programs for both of the quantitative and qualitative sections of the questionnaire. For the qualitative section of the question, which consisted of two-open ended questions, students' responses were coded into themes and analyzed in the Excel program. However, the results of the semi-structured interview were qualitatively analyzed.

4. Results

4.1 Results of the Study Questions

4.1.1 Comparison of Experimental and the Control Groups in English Grammar Evaluation

The independent sample t-test revealed there was no a statistically significant difference in the post-test scores for the experimental group ($M=33.30$, $SD=6.85$) and control group ($M=30.78$, $SD=8.19$), $t(41) = -1.08$, $p = 0.285$. A simple comparison of the mean scores of both groups indicates that the grammar knowledge of the experimental group was higher than the control group, but it did not reach the level of statistical significance. There is no statistical conclusion that the flipped classroom positively affected students' proficiency in this study; however, the flipped classroom strategy seemed to have an effect on the means though it did not reach the level of statistical significance.

Table 2. Independent sample t-test results for group differences in the post-test

Group	.No	Mean	St. Deviation
Control	23	30.7826	8.19066
Experimental	20	33.3	6.85258

**significant at 0.05level.

4.1.2 Students' Attitudes and Perceptions of the Flipped Classroom

The collected data from the satisfaction exploratory questionnaire and the semi-structured interview showed that experimental group students' opinions and attitudes toward the flipped classroom were positive, and that they agreed the strategy enhanced their communication, benefited their learning, and encouraged their autonomy. The questionnaire was administered to the 20 students of the experimental group and their responses were analyzed by the SPSS program, using descriptive statistics to determine frequencies of students' responses on the Likert scale: strongly agree, agree, neutral, disagree, and strongly disagree (see Appendix F).

In the first two items on the questionnaire, the students were asked to evaluate whether they communicated a lot with the teacher and their classmates during the flipped lessons. Students' responses to statement one and two indicated that they strongly agreed that the flipped classroom enhanced their communication with the teacher (mode= 5). They also felt communication with their classmates was increased, as the students generally agreed with the statement (mode = 4).

Regarding students' autonomous learning, they were asked if the flipped classroom strategy encouraged them to work on their own and to explore their own strategies for self-learning. In this third statement, students mostly felt neutral regarding if the flipped classroom had increased their autonomy (mode = 3). In statement 7, they did not feel that they explored suitable self-learning strategies (mode = 2).

Statements 4, 5 and 6 evaluated whether students used what they had learned outside of the classroom on their own in-class activities and tasks. In statements 4 and 5, on the whole the students agreed that that their lessons had real life application (mode = 4) and helped them to complete the writing and speaking tasks during the lesson (mode = 5). This is shown with a mode of 4 for statement 4 and 5. However, in statement 6, students had a neutral response (mode = 3) regarding if they had applied their out-of-class experience.

Statements 8 and 9 evaluated students' attitudes towards the adopted e-learning tool (Edmodo) and the online learning resources (videos). In respect to whether the adopted e-learning tool (Edmodo) was easy to use, students felt that they did not need technical support to access the lesson content on Edmodo, as the mode of their responses was 2. In evaluating whether the online resources (videos) helped them improve their learning, 8 students agreed, 6 were neutral, and 6 disagreed (mode = 3).

Statements 10 and 11 evaluated if students had positive attitudes towards the flipped classroom strategy. Students were asked to report if they would like to repeat the experience of self-learning, and if they liked the routine of the flipped classroom strategy. Students were generally neutral in regard to their willingness to re-experience self-learning strategies in the future (mode = 3); whereas, the majority of the students liked the routine of the flipped classroom (mode = 4).

In order to identify what element students valued the most in the flipped classroom, students were asked to select all the factors that they feel improved their learning during the flipped classroom lessons. Fifteen out of twenty students selected in-class group discussion and thirteen of the students selected watching the video at home on their own. Another factor that the students valued in the learning process is group collaboration since it was selected by ten of the students. However, the available access to online content and course materials, evaluation and feedback, and the ease of use of the web environment were not rated by students as the most important factors in improving their learning in the flipped classroom. The evaluation and feedback element was chosen by eight students and the access to online content and availability of the e-learning tool (Edmodo) were only selected by five students (see Figure 1).

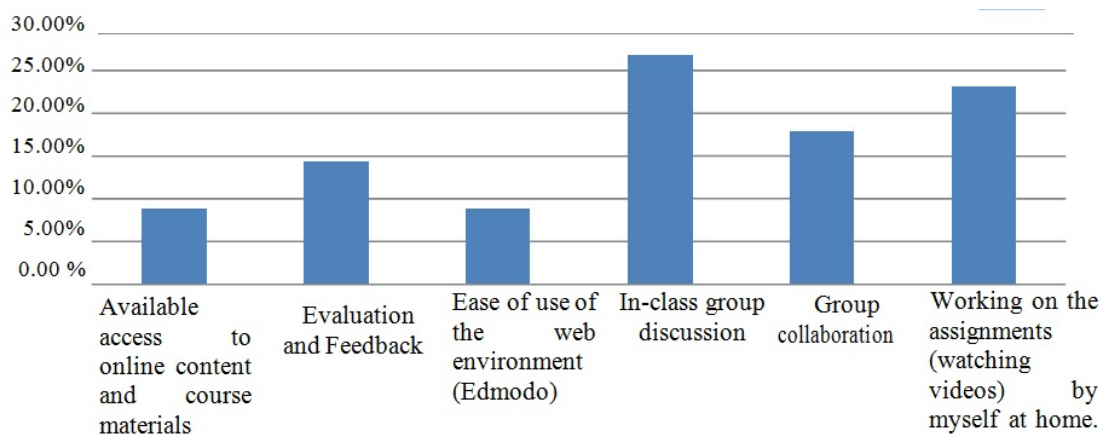


Figure 1. The elements that the students value in the flipped classroom strategy

4.1.3 Students' Perceptions and Suggestions about the Flipped Classroom

The experimental group students were also asked to express their perceptions of and suggestions for the flipped classroom in two open-ended questions at the end of the questionnaire. Students' responses were coded and statistically analyzed by the Excel program. Students' responses are presented in percentages in the graphs below (Figure 2 and Figure 3).

The first open-ended question was "What are the other aspects that have helped to improve your learning in the flipped classroom?". This question was answered by eleven students out of the twenty students. The students' responses showed that the most favored aspects of the flipped classroom were watching videos and in-class

activities. The majority of these responses indicated that the students value having authority to control the video, like repeating the video, and watching the videos anytime, anywhere and appreciated the collaborative and competitive in-class activities. In addition, five students acknowledged the teacher collaboration and support; whereas, three students mentioned that their classmates' explanations and support were one of the most helpful aspects of the flipped classes (see Figure 2).

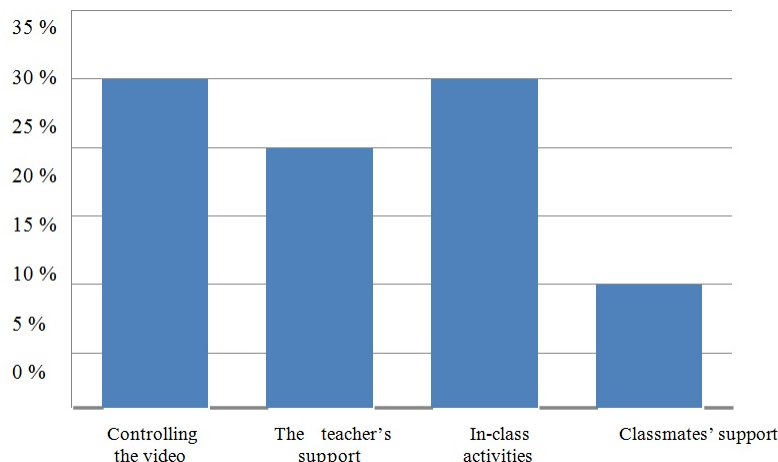


Figure 2. The other aspects of the flipped classroom that students' think helped them to improve their learning

In the second open-ended question, the students were asked to provide their suggestions for how to improve the flipped classroom experience and for any other general comments about the course. The collaborative and competitive activities were highly suggested by the students and others recommended the addition of more videos and implementing the flipped classroom strategy in other subjects (see Figure 3).

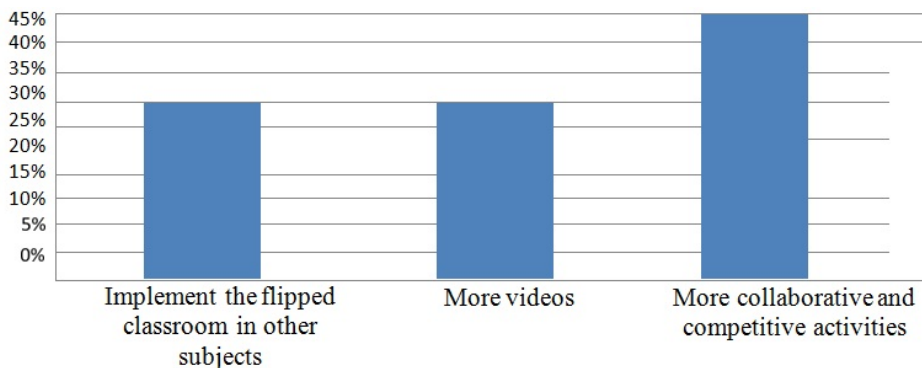


Figure 3. Students' suggestions and recommendations

Semi-structure interview

In order to understand students' perceptions of the provided videos, the researcher conducted a semi-structured interview with five of the experimental group students. The interview consisted of three questions:

1) *Did you find it difficult to find time for watching the videos? If yes, why? (how much time did it take you?)*

Students' answers varied. Three students answered yes because it took up to 15 minutes. Some noted they have other assignments, projects, or exams that compete for their time. One of them commented although she was busy, she managed to find five minutes to watch the video. On the other hand, two students replied that it was not difficult to find the time and that it only took them five to ten minutes to watch the video.

2) Did you feel the videos were beneficial or not? Why?

Regarding the usefulness of the videos, all of the five students said yes, the videos were beneficial. When students were asked to explain why they thought the videos were beneficial, their answers included that they could repeat the video to understand more, practice the pronunciation, or learn the vocabulary. However, one of the students answered differently. She said: "Sometimes, the illustration in the videos helped her to understand more and saved the classroom time." Additionally, two students said that they needed more practice in daily life.

3) Do you like self-learning through the flipped classroom, why?

Generally, the students agreed that they liked watching the video but their answers were somewhat diverse. Three students said that they liked self-learning to some extent because they needed to ask for clarification on some parts of the lesson and some lessons they understood better with the teacher's explanation. Two students answered yes, they liked these self-learning activities as they saved time, efforts, and allowed them to repeat the video. They also said that they could ask the teacher if they needed any clarification.

5. Discussion and Conclusion

5.1 Discussion

In this study, the researchers investigated if the flipped classroom strategy would make a significant difference in the experimental and control groups' achievements in relation to English grammar among the Saudi secondary school students. While this difference was not found to be statistically significant, the post-test results show that adopting the flipped classroom strategy appears to play a role in enhancing students' grammar knowledge, as the mean score of the experimental group was higher than that of the control group. This is consistent with the findings of studies done in other cultural and educational contexts such as Kang (2015) and Han (2015), whose studies found that the flipped classroom improved students' grammar knowledge when compared to other instructional methods. Specifically confronting the unique challenges of the Saudi context, analyzing students' responses in this study revealed that flipping English grammar classes could help in solving some of the problematic issues of Saudi secondary schools found by Al-Seghayer (2015) and Rahman and Alhaisoni (2013). In contrast to the passive role that the students usually play in Saudi EFL classes, students in the flipped classroom were active learners. In the flipped classroom, students agreed that they worked hard to learn by themselves. In addition, students' responses in the semi-structured interview revealed that they played an active role in the learning process. For example, students said that they sometimes needed to view the lesson more than once to understand the lesson content or to practice pronouncing some words. Students also stated that they needed to communicate with the teacher to clarify some the ambiguous or unclear points of the lessons. All these responses proved that the flipped classroom strategy activated students' role in the learning process. This shows that flipping English classes can solve the sociocultural problem stated by Alrabai (2016), which is the dominance of the Arabic language and cultural resistance to the use of English in Saudi Arabia that limits the EFL students' chances to communicate in English. Flipping English classes will create opportunities for students to practice the language outside and inside the classroom.

Furthermore, adopting the flipped classroom strategy solved the problem found by Al-Hamlan and Baniabdelrahman (2015), which was the difficulty of applying the learned grammar rules while practicing English. In this study, most of the students agreed that they applied the grammatical rules that they had learned in the flipped classroom in speaking and writing activities. Using videos as learning materials additional to the textbook fulfilled Saudi secondary school students' need identified by Al-Kathiri (2015) and Al-Hamlan and Baniabdelrahman (2015), which was the necessity of exposure to native-like English contexts through the use of technology. Therefore, researchers recommend curriculum developers and teachers consider adding e-learning tools and self-learning strategies such as the flipped classroom to EFL syllabus of secondary schools to free up the class time for more communicative activities that allow for the practice of grammar in authentic situations.

In addition, adopting the flipped classroom in grammar classes could help solve the problems stated by Assalahi (2013) regarding a lack of communicative language teaching approach in grammar lessons and shortcomings in speaking skills as found by several researchers (Al-Hamlan & Baniabdelrahman, 2015; Al-Seghayer, 2015). Therefore, it appears necessary to continue to study and experiment with flipped lessons in the Saudi context in order but to examine its impact on communication skills since speaking English fluently is one of primary needs of high school students in Saudi Arabia (Al-Hamlan & Baniabdelrahman, 2015). Future studies can build on this study to obtain more significant results. The cause of the non-statistically significant results could be the short length of the experimental treatment. Furthermore, this study did not employ any strategy to assure that students watched the videos (e.g., a quiz at the beginning of the lesson). Not knowing how many students really watched the videos could be another cause for the non-statistically significant results. Therefore, future researchers must

consider the evaluation strategies and the length of the experiment. Additionally, a close observation of students should occur if a researcher is evaluating whether a flipped classroom strategy can help develop Saudi EFL students' speaking and communication skills because it will provide more extensive and more accurate results as found by Obari and Lambacher (2015) and Han (2015).

In addition, the researcher investigated students' attitudes and opinions towards the flipped classroom strategy by analyzing students' responses to the questionnaire and the semi-structured interview. Generally, students' attitudes were positive as the majority agreed that they liked the routine of the flipped classroom. Students also suggested implementing the flipped classroom in other subjects. However, two out of the five students in the semi-structured interview said that they hardly find a room in their busy schedule to watch the video. This shows that considering students' workload is crucial to their acceptance of the out-of-class extra tasks. This study's findings aligned with those of other studies such as Alrowasi (2015), Kang (2015), and Kostka and Brinks Lockwood (2015), as well as Obari and Lambacher (2015) in that students' attitudes towards flipping English classes were generally positive in this experiment in Saudi Arabia just as in the diverse contexts of the existing studies.

Regarding students' opinions of the effectiveness of the flipped classroom strategy on improving their learning and fostering their self-learning opportunities, students rated the in-class activities highly and availability of videos outside the classroom as one of the factors that improved their learning. This was clear in students' responses in the multiple choices question and the open-ended question. This shows that one of the most important sources of motivation in EFL classes is the use of appropriate activities to help students practice the language, which supports the findings of Han (2015) and Hsieh et al (2016). Kang (2015) found that collaborative activities of the flipped classroom enhanced students' motivation and participation. However, in this study, few students agreed that the flipped classroom enhanced or elevated the self-learning skills. This could be due to the few out-of-class activities, which consisted solely of watching videos. In Han's study (2015) flipping English classes proved to foster students' autonomous learning because they were provided with various and multiple materials to explore and learn from. This implies that additional activities should be used in future studies instead of just videos to foster students' autonomous learning.

In summary, it is clear that EFL learning is in need of studies that offer practical solutions rather than just highlighting the problem. This study presents one possible solution for the current problems in both EFL Saudi education in particular and in EFL education in general, which is the minimal opportunities to use and practice English inside and outside of the classroom. More experimental studies on the common and well-known problems of EFL education will contribute to the growth and development of EFL education.

5.2 Recommendations

Since this study's positive findings are similar to other flipped classroom Saudi studies conducted by AlRowais (2014), Al-Otaibi (2016), Al-Harbi (2015), and Al-Zahrani (2015), evaluating the flipped classroom strategy in different contexts in Saudi education is recommended, especially in contexts where students need to have more time to practice what they have learned under direct supervision and guidance of the instructor. The researcher also recommends implementing the flipped classroom strategy to investigate and confirm its effect on the main language skills: reading, writing, speaking, and listening. Based on the literature review and the findings of this study, it is essential to apply the flipped classroom in speaking and listening classes. As the literature review indicates, becoming fluent in the English language is the primary goal of EFL Saudi students. It also indicates that Saudi EFL learners lack opportunities to practice the language inside and outside the classroom. In this study, the majority of the students agreed that flipping English classes provide them with more opportunities to communicate in English. Finally, it is important to plan carefully for implementing the flipped classroom to eliminate the obstacles that could accompany its adaptation. Those obstacles could be a lack of online access to the materials, a lack of technological skills from both sides, teachers and students, or from a lack of students' time to learn outside to the classroom. Furthermore, it is crucial to employ strategies for encouraging students to watch videos such as mandatory commenting on videos or quizzing. Encouraging students to do the out of class work is one of the important pillars of the successful flipped classroom. Last but not least, the researcher recommends the EFL textbook designers and developers adjust the curriculum to support self-learning and to include more interactive and collaborative activities to increase students' opportunities to practice the target language.

5.3 Implications for Future Study

Based on the literature review, it is clear that most of the existing studies that include technology and student-centered methods were conducted in higher education rather than in secondary schools. Therefore, researching

the impact of adopting technological based methods in public schools is recommended. Additionally, future studies should quantitatively and qualitatively evaluate teachers' perceptions of adopting the flipped classroom in EFL context, since teachers are such a crucial part of successful flipped classrooms.

5.4 Conclusion

This study was an attempt to illustrate an open path in front of curriculum developers and teachers, as well as researchers to overcome the major obstacles faced by EFL secondary school learners in Saudi Arabia, which include low proficiency levels, lack of opportunities for language practice, and teacher-led classes. Therefore, the present study was conducted on EFL secondary school Saudi students in Riyadh, to investigate the impact of the flipped classroom on students' performance and attitudes. The flipped classroom is an educational strategy that enables teachers to support students' self-learning by providing them with interesting e-learning materials by means of online communication in order to free class time for more student-centered activities.

The findings indicated that although the performance of students taught using the flipped classroom strategy was not statistically significantly higher than the non-flipped (traditional) class, their scores were slightly higher than those of the traditional class. This study also found that students hold positive attitudes towards the flipped classroom as it gave them more opportunities to communicate in English and helped them to improve their pronunciation and support their understanding of the lesson by repeating the video. Students also suggested adopting the flipped classroom strategy in other subjects as well.

Finally, including flipped classroom strategies in the Saudi EFL curriculum will help to take the control that had previously been held exclusively by Saudi teachers and put it in the hands of the learners, helping them be autonomous, develop communicative skills, and achieve higher proficiency levels. Therefore, the researcher recommends carrying out more studies to discover how the flipped classroom strategy can be employed for more effective teaching and learning.

Acknowledgements

We would like to express our gratitude to teacher Bushra and her students for agreeing to participate in this study.

References

- Al-Furaydi, A. A. (2013). Measuring e-learning readiness among EFL teachers in intermediate public schools in Saudi Arabia. *English Language Teaching*, 6(7), 110. <http://dx.doi.org/10.5539/elt.v6n7p110>
- Al-Hamlan, S., & Baniabdelrahman, A. (2015). A Needs Analysis Approach to EFL Syllabus Development for Second Grade Students in Secondary Education in Saudi Arabia: A Descriptive Analytical Approach to Students' Needs. *American International Journal of Contemporary Research*, 5(1) 118-145
- Al-Hamlan, S. (2013). EFL Curriculum and Needs Analysis: An Evaluative Study.
- Al-Harbi, A. H. (2015). A Flipped Learning Approach Using Social Media in Health Informatics Education. *Creative Education*, 6, 1466-1475. <http://dx.doi.org/10.4236/ce.2015.613147>
- Al-Jarf, R. S. (2005). The effects of online grammar instruction on low proficiency EFL college students' achievement. *Asian EFL Journal*, 7(4), 166-190.
- Aljumah, F. H. (2012). Saudi learner perceptions and attitudes towards the use of blogs in teaching English writing course for EFL Majors at Qassim University. *English Language Teaching*, 5(1), 100.
- Al-Kathiri, F. (2015). Beyond the classroom walls: Edmodo in Saudi secondary school EFL instruction, attitudes and challenges. *English Language Teaching*, 8(1), 189-204.
- Al-Okaily, R. (2013). Mobile learning and BYOD: implementations in an Intensive English Program. *Learning and Teaching in Higher Education: Gulf Perspectives*, 10(2).
- Al-Otaibi, F. (2016, March). Saudi Science Teachers' Perceptions of the Flipped Classroom Strategy in Tabuk City. Paper presented at the meeting of Educational Integration between the Public and Higher Education. Riyadh, Kingdom of Saudi Arabia
- Al-Qasim, N., & Al Fadda, H. (2013). From call to mall: The effectiveness of podcast on EFL higher education students' listening comprehension. *English Language Teaching*, 6(9), 30-41.
- Alrabai, F. (2016). Factors underlying low achievement of Saudi EFL learners. *International Journal of English Linguistics*, 6(3), 21. <http://dx.doi.org/10.5539/ijel.v6n3p21>
- Alresheed, S., Leask, M., & Raiker, A. (2015). Integrating Computer-Assisted Language Learning in Saudi

- Schools: A change model. *Turkish Online Journal of Educational Technology*, 14(4), 69.
- AlRowais, A. S. (2014). The Impact of Flipped Learning on Achievement and Attitudes In Higher Education.
- Al-Seghayer, K. (2015). Salient key features of actual English instructional practices in Saudi Arabia. *English Language Teaching*, 8(6), 89. <http://dx.doi.org/10.5539/elt.v8n6p89>
- Al-Shehri, S. (2011, October). Context in our pockets: Mobile phones and social networking as tools of contextualizing language learning. In *10th world conference on mobile and contextual learning, Beijing, China* (Vol. 18, No. 2).
- Alshumaimeri, Y. A. (2008). Perceptions and attitudes toward using CALL in English classrooms among Saudi secondary EFL teachers. *The JALT Call Journal*, 44(2), 29-66.
- Alshumaimeri, Y. A., & Almasri, M. M. (2012). The effects of using WebQuests on reading comprehension performance of saudi EFL students. *TOJET : The Turkish Online Journal of Educational Technology*, 11(4).
- Al-Zahrani, A. M. (2015) From passive to active: The impact of the flipped classroom through social learning platforms on higher education students' creative thinking *British Journal of Educational Technology* , 46(6), 1133-1148. <http://dx.doi.org/10.1111/bjet.12353>
- Assalahi, H. M. (2013). Why is the grammar-translation method still alive in the Arab world? *Theory and Practice in Language Studies*, 3(4), 589-599. <http://dx.doi.org/10.4304/tpls.3.4.589-599>
- Basal, A. (2015). The implementation of a flipped classroom in foreign language teaching. *Turkish Online Journal of Distance Education*, 16(4). <http://dx.doi.org/10.17718/tojde.72185>
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: reach every student in every class every day*. Washington, DC: International Society for Technology in Education.
- Bowen, J. A. (2006, December). Teaching naked: Why removing technology from your classroom will improve student learning. *The National Teaching & Learning Forum*, 16(1), 1-5.
- DewiSuryani, A. (2014). The use of “flipping classroom” for teaching story-telling to the tenth graders. *Ejournal of Universitas Negeri Surabaya*.
- Educause Learning Initiativ. (2012). *7 things you should know about flipped classrooms*. Retrieved from <http://net.educause.edu/ir/library/pdf/ELI7081.pdf>
- Fareh, S. (2010). Challenges of teaching English in the Arab world: Why can't EFL programs deliver as expected? *Procedia - Social and Behavioral Sciences*, 2(2), 3600-3604. <http://dx.doi.org/10.1016/j.sbspro.2010.03.559>
- Flumerfelt, S., & Green, G. (2013). Using lean in the flipped classroom for at risk students. *Educational Technology & Society*, 16(1), 356-366.
- Gribbons, B., & Herman, J. (1997). *True and quasi-experimental designs*. Washington, DC: ERIC Clearinghouse on Assessment and Evaluation.
- Haake, S. (2013). ‘English in the Cloud’: The experience of one school in moving its curriculum and learning content online. *Literacy Learning: The Middle Years*, 21(3), 41.
- Hamdan, N. & McKnight, P. (2013). A review of flipped learning. *Flipped Learning Network*. Retrieved from <http://www.flippedlearning.org/review>
- Han, Y. J. (2015). Successfully flipping the ESL classroom for learner autonomy. *NYS TESOL Journal*, 2(98), 98-109.
- Hsieh, J. S., Wu, W. C. V., & Marek, M. W. (2016). Using the flipped classroom to enhance EFL learning. *Computer Assisted Language Learning*, 1-25. <http://dx.doi.org/10.1080/09588221.2015.1111910>
- Homma, J. E. B. (2015). Learner autonomy and practice in a flipped EFL classroom: Perception and perspectives in new digital environment. *Chiba University of Commerce review*, 52(2), 253-275.
- Huelskamp, D. (2015). Flipping the collegiate science classroom: A review of the research. *Global Education Journal*, 2015(1).
- Hung, H. T. (2015). Flipping the classroom for English language learners to foster active learning. *Computer Assisted Language Learning*, 28(1), 81-96. <http://dx.doi.org/10.1080/09588221.2014.967701>
- Ishikawa, Y., Akahane-Yamada, R., Smith, C., Kondo, M., Tsubota, Y., & Dantsuji, M. (2015). An EFL ipped learning course design: utilizing students' mobile online devices. In F. Helm, L. Bradley, M. Guarda, & S.

Thou sny (Eds), *Critical CALL – Proceedings of the 2015 EUROCALL Conference*, Padova, Italy (pp. 261-267). <http://dx.doi.org/10.14705/rpnet.2015.000343>

Johnson, L., & Renner, J. (2012). Effect of the flipped classroom model on secondary computer applications course: student and teacher perceptions, questions and student achievement. (Doctoral dissertation). Retrieved from <https://theflippedclassroom.files.wordpress.com/2012/04/johnson-renner-2012.pdf>

Kang, N. (2015). The comparison between regular and flipped classrooms for EFL Korean adult learners. *Multimedia- Assisted Language Learning*, 18(3), 41-72.

Kostka, I., & Brinks Lockwood, R. (2015). What’s on the Internet for flipping English language instruction? *Tesl-Ej*, 19(2), 1-12. Retrieved from <http://www.tesl-ej.org/wordpress/issues/volume19/ej74/ej74int/>

Obari, H., & Lambacher, S. (2015). Successful EFL teaching using mobile technologies in a flipped classroom. In *Proceedings of the 2015 EUROCALL Conference*, Padova, Italy (pp. 433-438). <http://dx.doi.org/10.14705/rpnet.2015.000371>

Rahman, M. M., & Alhaisoni, E. (2013). Teaching English in Saudi Arabia: Prospects and challenges. *Academic Research International*, 4(1), 112.

Strayer, J. F. (2012). How learning in an inverted classroom influences cooperation, innovation and task orientation. *Learning Environments Research*, 15(2), 171-193. <http://dx.doi.org/10.1007/s10984-012-9108-4>

Sung, K. (2015). A case study on a flipped classroom in an EFL content course. *Multimedia- Assisted Language Learning*, 18(2), 159-1

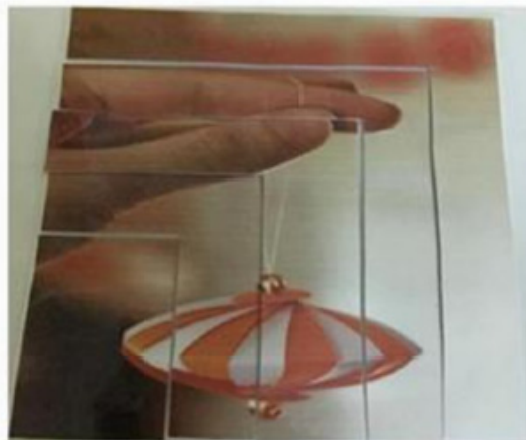
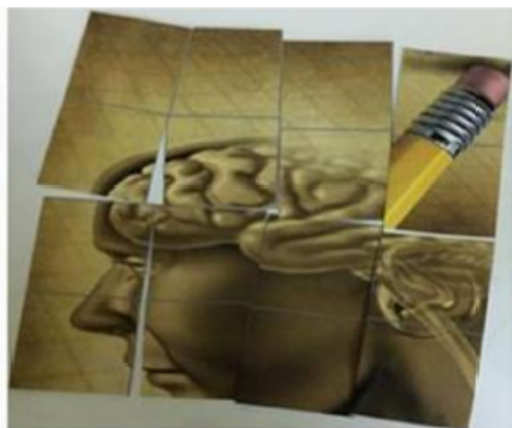
Appendices

Appendix A. Samples of the pair or group activities used at the beginning of the flipped classroom

1) The following activity was usually used during the flipped classroom lessons:

What I <u>K</u> now	What I <u>W</u> onder (or want to know)	What I have <u>L</u> earned
---------------------	---	-----------------------------

2) The following activity was used to practice speaking or writing. The teacher asked the students to rearrange the puzzle in groups then talk or write about them using the learned grammar lesson. The lesson was about modals to express necessity, needs, or possibilities.



Appendix B. Placement test

Student's name:..... Class:.....

- 1 () 's your name? Thomas
a- How b-Who c-What d- Where
- 2 This is Lucy and her brother, Dan. () My friends.
a-We're b-I'm c-You're d-They're
- 3 ()? I'm from Italy.
a- Where are you from? b- Where you are from? c- Where from you are? d- From where you are?
- 4 I'm from Milan. () is in Italy.
a- They b-It c-He d-She
- 5 Excuse me, how () your last name? R-I-L-E-Y
a- spell b-you spell c- do you spell d- spell you
- 6 Oh, () are my kes.
a- This b-These c-That d- It
- 7 I'd like () somelette, please.
a-a b- c-an d-Wo
- 8 And here is your ().
a- desk b-desks c-a desk d-an desk
- 9 My name's Pete and this is Sylvia. () doctors from france.
a-I'm b-We're c-She's d-They're
10. Sorry, (). My name's Eric.
a-I isn't b- I is not c- I aren't d- I'm not
- 11 ()? No, he isn't.
a-Are they teacher? b-Are your from Italy c-Is Mr Banning a teacher? d-Is this your phone?
- 12 () is the school? It's 50 years old.
a-How many year b-How much years c-What year d-How old
- 13 What is ()?
a-Job Mary b-Mary Job c-Mary's job d-Job's Mary
- 14 Your bag is next () the table.
a-on b-to c-in b-of
- 15 ()are the keys? on the table.
a-What b-When c- Where d-Who
- 16 I go to work () train.
a-with b-by c-for d- in
- 17 She () a dog.
a-not have b-don't have c-don't has d-doesn't have
- 18 Stephen () in our company.
a-work b-works c-is work d-working
- 19 () live in London?
a-Are b-Is c-Do d-Does
- 20 () to the cinema.
a-We not often go b-We don't go often c-We don'often go d-Often we do't go

- 21 When do you play tennis? () Monday.
a-On b- In c-At d-By
- 22 What time () work?
a-start she b-do he starts c-does she starts d-does he start
- 23 () tow airports in the city.
a-It is b-There is c-There are d-This is
- 24 There aren't () here.
a-a resturant b-any resturants c-any restaurant d-a restaurant.
- 25 I'm afraid it's ().
a-a hotel expensive b-expensive hotel c-expensive a hotel d-an expensive hotel
- 26 They () popular TV programmes in the 1980s.
a-are b-were c-was d-is
- 27 () at school last week?
a-Do you where b-Was you c-Were you d-You where
- 28 Brat Pitt is a popular actor but I don't like ().
a-him b-his c-her d-them
- 29 We () the film last week.
a-see b-saw c-sees d-were see
- 30 He () tennis with me yesterday.
a-doesn't played b-didn't played c-not played d-didn't play
- 31 She was born () May 6th, 1979.
a-in b-at c-on d-from
- 32 Where () last summer?
a-you went b-did you went c-did you go d-do you went
- 33 Were you at the shops at 5 p.m. yesterday? No, I ()
a-didn't b-am c-wasn't d-weren't
- 34 Excuse me, () is the T-shirt? It's £25.99.
a-what expensive b-How much c-How many d-How price
- 35 She is only four but she ()
a-can read b-cans read c-can reads d- cans reads
- 36 This part is boring. We () a goodtime.
a-don't have b-aren't having c-don't having d-aren't have
- 37 Sorry, I () you at the moment.
a-can't help c-don't can help c-can't helping d-can't helps
- 38 I () my computer very often.
a-am not using b-don't use c-doesn't use d-am not use
- 39 It's my mum's birthday next week. I () her a present.
a-buy b-buys c-am going to buy d-buying
- 40 What () do after schoo today?
a-are you going b-are you c-do you d-you

Appendix C. Post-test

- 1 You have to keep () to achieve your goal.
a-work b-woking c-the work
- 2 I () the meeting tomorrow. I don't feel well..
a-might cancel b-could have canceled c-might have cancelled
- 3 Let's go on a trip next week, ()?
a-Can we b-will we c-shall we
- 4 The food () ready by now. It's been in the oven for over an hour.
a- must be b-can be c-must have been
- 5 He stopped () pictures when he saw the 'No photos' sign.
a- take b-to take c- taking
- 6 I have to many books ().
a- carrying b- to carry c-carry
- 7 As soon as layla (), she will meet the new customer.
a-arrive b-arrives c-will arrive
- 8 You () worry about the tickets. My friend will help us to get them.
a- don't need to b- not need c-didn't need
- 9 Ben is too tired () to the festival today.
a- going b-to go c-for going
10. That ()Sara's sister. She doesn't look like Sara at all.
a. Would not be b- wasn't c. can'tbe
- 11 If I see Jaime, I () him his book back.
a. give b. will give c. would give
- 12 If I () you, I would transfer to another apartment. This neighborhood is crowded.
a. am b. was c. were
- 13 The jungle is a dangerous place to sleep. You () goal one.
a. Might not b. have not c. must not
- 14 I will get some rest before the kids ().
a.come b.came c. comes
- 15 I regret () to my sister like that.
a.talking b.to talk c.talk
- 16 My sister () if the doctor hadn't arrive in time.
a.may b.might have died c.may be dead
- 17 If Lara didn't have lots of responsibilites, she () more.
a.would travel b.will travel c. can travel
- 18 You () go to the supermarket. We will call Danny to bring what we need.
a.don't need to b. no need to c.didn't need to
- 19 Before I go out, I () the bird.
a.will feed b.feed c.would feed
- 20 She is not here, ()?
a.is she b.isn't she c.she is
- 21 You () get ready early. I wil not wait for you.
a.can b. have to c.could

- 22 I can't find my wallet. I () it at home.
a. must have left b. must have leave c. leave
- 23 We () in the backyard after you eat your meal.
a. will play b. would play c. play
- 24 Good! You turned off the oven just in time. You () the cake.
a. might burn b. could have bured c. would burn
- 25 If she () in your place, she would buy less toys.
a. were b. was c. is
- 26 Our schedule is full. We () the company.
a. might not visit b. might not have visited c. would not have visited
- 27 Anna regrets () them our secret.
a. tell b. to tell c. telling
- 28 If she () for what she did, I will give her the present.
a. apologizes b. apologize c. will apologize
- 29 Let's prepare dinner together, ()?
a. can we b. will we c. shall we
- 30 She refused () the contract.
a. to sign b. signing c. sign
- 31 If I had abike, I () in the race.
a. can participate b. would participate c. will participate
- 32 It () freezing outside. It is -5 degree Fahrehheit.
a. could be b. can be c. must be
- 33 He () the bus if he hurries.
a. will miss b. will not miss c. miss
- 34 Kate: Lara and Sara said: "they are going to their brother's wedding" Kate's sister: That () true! They don't have a brother.
a. can't be b. could not be c. might not be
- 35 You () put on the seat-belt when you drive.
a. could b. need c. have to
- 36 I () the book, but I'm not sure. I forget many books I've read.
a. could read b. read c. may have read
- 37 Nora () her mother that I was sick. She asked me how I was feeling.
a. must have told b. might tell c. could have told
- 38 You are coming to school tomorrow, ()?
a. are you b. aren't you c. shall you
- 39 You () park here. It is prohibited.
a. may not b. must not c. have not
- 40 If you () home late I will tell my father.
a. came b. come c. comes
- 41 John hopes () London eye.
a. visit b. visisting c. to visit
- 42 I () the race, but I sprained my ankle just before crossing the finish line.
a. can win b. could have won c. would win

Appendix D. Post- Questionnaire to Investigate
Students' Perception Towards Flipped Classroom Strategy

Dear student,

This questionnaire aims to evaluate your opinion regarding watching videos at home to help you with grammar lessons. Please answer the following questions carefully and honestly.

Note: Your answer will be confidential.

Demographic Questions:

Student's name (optional):.....

Grade:..... Class:.....

1- How old are you?

- a. 15 years old
- b. 16 years old
- c. 17 years old
- d. 18 years old

2- How long have you been using Edmodo?

- a. Never
- b. Less than a year.
- c. One year
- d. Two years
- e. More than two years

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. In flipped classrooms, I communicated lot with other students.					
2. During the last grammar lessons, I communicated with the teacher.					
3. During the last grammar lessons, I have had to work hard to learn by myself.					
4. The exercises I have worked on during the grammar lessons deal with real life applications.					
5. The availability of grammar lessons as videos helped students to use the grammar knowledge in writing and speaking tasks.					
6. During the last grammar lessons, I have applied my out-of- class experiences					
7. During the last grammar lessons, I have explored my own strategies for learning.					
8. I needed technical assistance to watch the videos on Edmodo.					
9. Availability and access to technical support and resources have helped me improve my learning.					

10. I would choose to take another class using video activities at home.

11. I like the routine of watching the videos at home and then doing activities about them in class.

12. Which of the following have helped you improve your learning experience during the last unit? (you may pick more than one)

- a. Availability and access to online content and course materials
- b. Evaluation, feedback.
- c. Ease of use of the Web environment (Edmodo).
- d. In-class group discussion
- e. Group collaboration
- f. Working on the assignments (watching videos) by myself at home.

13. What other aspects of this course have helped improve your learning during the last grammar lessons?

14. Please provide suggestions for how to improve the flipped classroom experience, or any other general comments about the course.

Appendix F. Students' Perceptions and Attitudes Towards the Flipped Classroom Strategy

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Mode
1. In flipped classrooms, I communicated a lot with other students.	35.00% 7	40.00% 8	10.00% 2	15.00% 3	0.00% 0	20	4.0
2. During the last grammar lessons, I communicated with the teacher.	40.00% 8	25.00% 5	15.00% 3	20.00% 4	0.00% 0	20	5.0
3. During the last grammar lessons, I had to work hard to learn by myself.	20.00% 4	35.00% 7	45.00% 9	0.00% 0	0.00% 0	20	3.0
4. The exercises I have worked on during the grammar lessons deal with real life applications	20.00% 4	45.00% 9	30.00% 6	5.00% 1	0.00% 0	20	4.0
5. The availability of grammar lessons as videos helped me to use the grammar knowledge in writing and speaking tasks.	20.00% 4	35.00% 7	25.00% 5	20.00% 4	0.00% 0	20	4.0
6. During the last grammar lessons, I have applied my out-of-class	15.00% 3	30.00% 6	45.00% 9	10.00% 2	0.00% 0	20	3.0
7. During the last grammar lessons, I have explored my own strategies for learning.	15.00% 3	10.00% 2	35.00% 7	35.00% 7	5.00% 1	20	2.0
8. I needed technical assistance to watch the videos on Edmodo	10.00% 2	5.00% 1	10.00% 2	60.00% 12	15.00% 3	20	2.0
9. Availability and access to technical support and resources have helped me improve my learning.	10.00% 2	20.00% 4	30.00% 6	25.00% 5	15.00% 3	20	3.0
10. I would choose to take another class using video activities at home	10.00% 2	35.00% 7	35.00% 7	10.00% 2	10.00% 2	20	3.0
11. I like the routine of watching the videos at home and then doing activities about them in class	20.00% 4	45.00% 9	20.00% 4	5.00% 1	10.00% 2	20	4.0

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).