



DELVING INTO FLIPPING EFL CLASSROOM: A MIXED METHOD STUDY

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Abstract:

This pre-test post-test quasi-experimental study was grounded in a mixed method embedded design to delve into the quality and efficiency of flipped classroom model in enhancing university prep students' overall academic performance in EFL and that in its sub-skills in addition to the durability of that performance. The study has also pioneered to reveal the impact of gender on flipped classroom EFL learners' post-test scores. Quantitative data was gathered through the administration of EFL Achievement Test to 41 EFL students enrolled at Foreign Language School, Gebze Technical University in two different classrooms randomly assigned as experimental (N= 21) and control group (N=20). The intervention lasted during the whole 2016-2017 fall term. On the other hand, qualitative data was collected through follow-up semi-controlled interviews with 9 experiment group students from different achievement groups. All the quantitative data was analyzed using Statistical Packages for Social Sciences (SPSS) 21 for Windows and ITEMAN4 while qualitative data was analyzed manually by employing content analysis procedures. The results of the study revealed flipped classroom model as a significant facilitator of EFL performance and long-term retention of this performance at universities in Turkey. More specifically, students in flipped classroom significantly outperformed those in the traditional lecture based classroom in all skill areas except for listening. Furthermore, qualitative results supported this impact of flipped classroom model on EFL performance. As a unique aspect of the study, EFL students' performance in the flipped classroom was explored to be

independent of their gender. To conclude, the present study has promised a bulk of valuable results that set flipping EFL classrooms as an efficient way of dealing with failure in EFL in Turkey.

Keywords: academic achievement in EFL, blended learning, flipped classroom model

1. Introduction

In today's post-modern and globalizing world, rapid development of technology has shaped many facets of life ranging from commerce, policy, science, security, culture to social and personal relationships. This process brought an inevitable impact on the practices and organization of the educational processes. In this new process, learners began to be regarded as individuals as a whole construct of physical, cognitive and affective variables were put into the heart of educational processes and procedures (Akbari, Hosseini, 2008). This new tendency has left its mark on the practices and perceptions of education itself. Within this perspective, the factors related to individual differences began to take up the most of the literature on teaching/learning and the professional literature was obsessed with terms and phrases which try to capture the elusive concepts that distinguish one person from another (Crozier, 1997).

In such an age of individualizing education, English as a Foreign Language Teaching (EFL) carries important functions and roles and cannot resist those changes and developments triggered by the recent tendencies in education. One of the most important reasons behind this fact is that today's conditions have incapacitated those who are able to communicate in only their native language in different aspects of their lives. Different reasons may prompt such an obligation to be competent in a second language. Yet, out of them, it seems that the necessity to adapt to the pace of the rapidly changing world and get integrated to the rest of the world attract most of the attention. In this multilingual and multicultural world, this communication bridge is constructed with an international language, English. This is mostly because English is accepted as the most widely used foreign language (Crystal, 1997). Scientific, social, economic and technological developments accompanied by the use of English, adopting it as the official language by some organizations such as European Union and international relationships in various dimensions among the countries have also added to the crucial role of the language since the second half of 21st century (Guilherme, 2007).

In today's globally breathing world, it is clear that most of the life is driven by the technology related tools. According to the uncodified laws of the world, it is also certain that this technological globe is run through English. The use of English spreads at such a rate that it gets easier to witness its use in various places and fields such as

international airports, sports, international mailing and conferences, commerce, international aid. According to Crystal (1997), there are approximately, except for EFL students trying to learn the language, 1,2 billion non-native English speakers while the number of the people speaking it as their native language is 330 million. Stressing the number of the people, native or non-native scattered all around the world, Smith (2015) defines it as the language of the industrial revolution, science and technology. Supporting this claim, the results of the Research Trends (2012) study, which was conducted on 21,000 articles from 239 different countries indexed in SCOPUS, indicated that all non-English journals required the researchers to write their abstracts in English and % 80 of all were written completely in English. Much more surprisingly, the study also explored that in such countries as Germany, France, and Spain, papers written in English are more than those in the country's own language. When the reality that the communication among non-native speakers is generally held in English in international setting is taken into account, it will be better understood that being able to communicate in English equals with being literate today. Therefore, in addition to its official status in more than 70 countries and being taught as EFL in more than 100 countries (Crystal, 1997); English is clearly accepted to be much more global language than ever. In turn, it becomes more associated with students' academic performance in a number of different fields than ever. As a result, this makes it really crucial for the members of this global society to keep updated in English. That current situation makes English as a means of survival for teenagers who are explored to spend most of their time on their technological tools and the internet. Therefore, in this globalised world where it is accepted that English is the international language, using that language communicatively turns out to be first condition of being literate. Taking these crucial multilingual and multicultural aspects of EFL into account, a great deal of effort has been internationally performed to explore the sub-skills and the processes involved as the determinants of the success in learning it (Baker, Boonkit, 2004; Block, 1986; Brantmeirer, 2007; Clément, Dörnyei, Noels, 1994; Haley, 2004; Hosenfeld, 1997; Iyitoglu, Aydin, 2015; Javier, 1997; Keshavarz, Ashtarian, 2008; Kim, Wang, Ahn, Bong, 2015; Khajavy, Ghonsooly, Fatemi, 2017; Marefat, 2003; Oxford, Burry-Stock, 1995).

In addition to the aforementioned international studies, there have also been a number of studies conducted in Turkey focusing on the factors influencing the success and failure in EFL learning and teaching (Akdoğan, 2010; Akkuş, 2009; Aküzel, 2006; Akyel, 2003; Ayhan, 1999; Başaran, Cabaroğlu, 2015; Çatal, 2015; Gömleksiz, 1993; Gülmez, 1982; Kabaharnup, 2010; Kanadlı, Bağçeci, 2015; Kazazoğlu, 2013; Kiziltepe, 2000; Oğuz, 1999; Özen, 1979). While some of the reasons for failure in EFL were attributed to learning and teaching oriented atmosphere including the teachers, some of them were found to be related to those associated with the learners themselves. Out of

them, commonly specified factors were found to be lack of positive attitudes towards and self-efficacy beliefs in EFL on the parts of the learners. On the parts of the teachers, they were specified as overcrowded classrooms lack of intelligent ways to integrate technology into teaching. In other words, the results indicated by Şahin (2009) indicate that most of the reasons behind failure of EFL in Turkey is explained with the factors related to learning & teaching atmosphere and those related to students' perceptions about themselves as EFL learners. More specifically, while they explained 80, 2 % of those reasons behind unsuccessful EFL in secondary schools, they stood for 71, 2 % of the factors leading to failure in EFL in primary schools. To make the situation more visible, the participant teachers of the studies stressed the inadequacy of teaching materials, heavily reliance on traditional teaching methods (Kabaharnup, 2010). The results have also indicated that the participant teachers related the failure in EFL to mostly overcrowded classrooms and lack of modern technologies (Akkuş, 2009; Akyel, 2003; Özen, 1979). They also clarify the problem by linking the overcrowded classrooms to lack of necessary teaching time allocated to each of the students. This detection as one of the reasons behind most of the failure in EFL is significant since "*all the learners need enough time to practice all the learned points to direct the brain to solve the codes of the new language*" (Engin, Seven, 2007, p. 12).

Within this perspective, when the crucial roles and functions EFL carries in today's technology-driven globalizing world are taken into account, it seems as a must to take the steps to apply new teaching procedures. Those procedures need to be supplied with the technology and let the teachers increase the time they spend on teaching. Additionally, such a new model must be a context-specific remedy for the problems of EFL learning and teaching in Turkey. On the other hand, increasing tuition costs and fees, online and technology-embedded course offerings trigger the researchers to revise the wisdom of traditional teaching methods and to consider appropriate alternatives (Bishop, Verleger, 2013).

The Flipped Classroom Teaching Model developed "*out of a history of experimentation with the concept of hybrid, or blended learning and problem based learning, using active learning techniques and new technologies to engage students*" stands as a response to the call of recent teaching model compatible with the needs of the age (Arnold-Garza, 2014, p. 8). Also known as inverted classrooms, the flipped classroom-teaching model is simply defined as "*events that have traditionally taken place inside the classroom now take place outside the classroom and vice versa*" (Lage, Platt, Treglia, 2000, p. 32). In other words, the flipped classroom model implies re-design of in and out of classroom activities. While the students get the instruction at home through some formerly delivered means ranging from simple slides, podcasts, audio or narrated presentations to video casts including animations, screen captures, and other

multimedia content, the classroom time is allocated to enhancing the related skills through problem-based teaching and engagement techniques (Educause, 2012).

The Flipped Classroom Teaching Model, cited mostly in the literature as based on student-centered theories, embraces interactive group learning activities inside the classroom, and direct computer-based online individual instruction outside the classroom (Bishop, Verleger, 2013). A number of international studies have indicated that the flipped model helps teachers in many ways. Thanks to it, teachers manage class time more efficiently by addressing multiple learning styles of the learners, donate them with more active learning opportunities getting them take responsibilities for their own learning, increase the time of interaction student and teacher spend on teaching and learning (Bergmann, Sams, 2012; Cole, Kritzer, 2009; Gallagher, 2009; Gannod, Berg, Helmick, 2008; Lage, Platt, Treglia, 2000; Overmyer, 2012; Siegle, 2014). As a result of these highlighted advantages of the application of the model in teaching, as stated by Arnold-Garza (2014), it is being applied in many disciplines ranging "*from engineering to life sciences to business to statistics*" (p. 11).

Understanding the role of media, internet and technology in teenagers' lives it becomes more important to enlighten those concerned about them including parents, the varying members of the world of education, policymakers (Rideout, Foehr, Roberts, 2010) Therefore, to deal more effectively with their problems, it is important to notice the digital gap between students' in and out of school lives (Downes, Bishop, 2012). This gap is formed because of teenagers' life routines. While they spend most of their times on the internet, playing computer games, listening to music, engaging with mobile phones or social networking out of classroom, they are exposed to traditional boring lessons lack of technology (Banitt, Theis, Leeuwe, 2013). Correspondingly, the flipped classroom model offers students online instructional videos out of the school and allocates class time for the expansion of the skills through problem-solving tasks. Right on this point, this model promises to tap into learners' interests by drawing on the sources they spend most of their time on.

Within this perspective, it seems that cited strengths of the flipped classroom model overlaps with the cited reasons behind the failure in EFL learning and teaching in Turkey. This study, therefore, incorporates the flipped classroom model and EFL teaching to answer the instructional needs and expectations of EFL learners and teachers in Turkey. In other words, by applying a flipped model rooted in blending distance learning with open-ended problem-solving experiences, the study takes the form of proposing a solution in response to main explored reasons of learners' being unsuccessful in EFL in Turkey. In this way, problem-solving group work and task based learning activities in the classrooms. Therefore, this study investigating the impact of flipped classroom model on EFL learners' performance as compared to that of

traditional teaching promise to produce valuable outcomes for a large number of people ranging from teachers, parents to curriculum developers and policy makers.

Despite the flow of technology into every aspect of modern life that will suggest a classroom model compatible with the needs of the 21st century, very little research is said to be conducted on flipped classroom (Abeysekera, Dawson, 2015). Since the flipped classroom stands for a recent topic in educational research, there seems to be lack of qualified research on its educational effectiveness (Bishop, Verleger, 2013). Supporting this, Abeysekera, Dawson (2015) claim to come up with, in contrast to its Google popularity, only eight articles in ERIC database including the phrase of the model in their titles, abstracts or keywords. They (2015) also stated only two of them were peer reviewed. In March, 2016, a similar search was carried out by the researcher of the current study himself in *Web of Science* database. On the database, 354 documents were found to include flipped classroom or inverted classroom in their titles. However, 119 of them were in the format of article written in English. Refining the research areas to educational sciences, the researcher explored only 82 of these articles written in English included “flipped classroom” or “inverted classroom” in their titles. The rest of those articles were in the areas ranging from chemistry, nursing and computer science to government law, surgery and agriculture. Moreover, the publication dates of the articles ranged from 2012 to 2016, which indicates flipped classroom as a recent research area of interest. In addition to students’ attitudes towards flipped implementation, the studies were found to cover its effectiveness in a lot of different academic disciplines. However, as a result of search of the words “foreign” and “English” within the results, only 7 of them, published in 2015 to 2016, focused on flipped classroom model in English classrooms.

The rare effort to study flipped classroom model in the context of Turkey is also indicated by the researcher. In March, 2016, a similar search was undergone in Turkish Journal Park Academic and only 4 articles were explored to be published between 2015 and 2016. Yet, two of these were found to focus on students' opinions about the flipped classroom implementation while one of them was in the form of a theoretical review of the model and the other was a case study. In the same way, the search for the phrase in the database of Council of Higher Education thesis center found out only 11 thesis carried out on flipped classroom by March, 2016 (Akgün, 2015; Aydın, 2016; Balıkcı, 2015; Boyraz, 2014; Ekmekçi, 2014; Gençer, 2015; Kara, 2016; Sırakaya, 2015; Turan, 2015; Yavuz, 2016; Yiğit, 2014). While three of them were master thesis, the other three were submitted for the Philosophy of Doctorate (PhD) degree. However, to the interest of the present study, only two of them were carried out in EFL. While one of the PhD study aimed to search the impact of the model on the success in writing in EFL (Ekmekçi, 2014), the other study was a master thesis designed to explore its impact on learners'

performance in only two grammar structures (Boyras, 2014). However, education is a long process (Ertürk, 1972) and as recommended by Boyraz (2014) the impact of an intervention must be traced in that long run. Therefore, the current study is significant since it aims to foster the understanding of this recent model on EFL learners' academic performance in the whole process of 2016-2017 fall term.

Thanks to its commonly cited benefit for enhancing lecture delivery, it is explored that the model is largely studied in disciplines such as science, technology, engineering, and mathematics (Hung, 2015). On the other hand, flip classroom model is theoretically claimed to be applicable in any subject area with students from different levels (Bergmann, Sams, 2012). However, it is currently applied with K-L2 education (Horn, 2013). Therefore, there seems a need in the related literature to gain insights about the impact of flipped classroom on non-STEM higher education settings (Abeysekera, Dawson, 2015; Hung, 2015). Hence, this study will take a pioneering step to combine flipped classroom model and EFL in higher education in Turkey.

In brief, the present study embraces two important points in Turkey: Failure in EFL and the flipped classroom model. Drawing on key functions of English in today's world and young people's heavily reliance on technology and internet, the study aims to form a base from which concerned bodies ranging from parents, teachers to curriculum developers and policy makers examine the impact of the model on the determinants of the success in EFL in Turkey.

2. Methodology

2.1. Design

This embedded study is grounded in a mixed method design. Inspired by the assumption that the uses of both qualitative and quantitative data will help "better understand the research problem and question than either method by itself", the mixed method research design is based on blending of qualitative and quantitative methods in a single study (Creswell, 2012, p. 535). In order to develop a more in-depth understanding of the experimental outcomes of the study, the embedded design out of mixed method research designs was adopted. Creswell embedded studies as a form of mixed method design where "*the purpose is to collect quantitative or qualitative data simultaneously or sequentially, but to have one of data play a supportive role to the other form of data*" (Creswell, 2012, p. 544).

2.2. Research Questions

The main purpose of the study is to explore the impact of flipped classroom teaching

model on the university prep EFL learners' academic performance. The aim is embodied in the following research questions:

1. Is there a statistically significant difference between pre- and post-test scores of the students in the traditional lecture-based classroom?
2. Is there a statistically significant difference between pre- and post-test scores of the students in the flipped classroom?
3. Is there a statistically significant difference between post-test scores of the students in the flipped classroom and traditional lecture-based classroom?
4. Is there a statistically significant difference in the durability of EFL achievement test performance between the students in the flipped classroom and traditional lecture-based classroom?
5. Do the post-test scores of the students in the flipped classroom differ significantly according to their gender?
6. What are the EFL learners' perceptions of their learning experiences in the flipped classroom?

2.3. Participants

The researcher employed convenience sampling method to draw the sample of the study. This is usually adopted when the researcher aims to select individuals who "are available, convenient and represent some characteristics the investigator seeks to study" (Creswell, 2012, p. 145). Such a sample "can provide useful information for answering questions and hypotheses" (Creswell, 2012, p. 145). As a result of this technique and such constraints as time, fund and nature of the data collection instruments, the researcher included prep EFL students from two different classes at Gebze Technical University, whose populations range from 20 to 34. Among the available classes, two ones where the researcher teaches himself were adopted and they were exposed to pre-test administrations of EFL Achievement Test. To see if these classes are equated in terms of the variables within the interest of the study, the researcher computed Independent Samples T-Tests.

Table 1: Independent Samples T-Tests for Equating Groups

Factor	Groups	N	\bar{x}	S	Sh $_{\bar{x}}$	t-Test			
						t	Df	p	d
EFL Achievement Pre-test	Control	20	50,65	17,03	3,81	0,765	39	,449	---
	Exper.	21	46,52	17,50	3,82				

The results indicated that the students did not differ significantly in terms of the mean

pre-tests scores of concerned variables of the study ($t = 0765$; $p > .05$). In other words, it was explored that two groups were assumed to be similar based on their pretest results.

Eventually, based on consent, the distribution of the participants according to the equated control and experiment groups was shown in the following table.

Table 2: Descriptive Statistics for the Participants

Groups	Gender	<i>N</i>	%	% _{valid}	% _{cumulative}
Experiment	Male	12	29,3	29,3	29,3
	Female	9	21,9	21,9	51,2
Control	Male	11	26,9	26,9	78,1
	Female	9	21,9	21,9	100

As seen in the table, 12 of the students in the experimental group were male while the rest (9) were females. On the other hand, 26,9 % (11) of the participant students were males in the control group while the remaining 9 students were females.

2.4. Instruments

2.4.1. EFL Achievement Test

In order to elicit the participant EFL learners' scores of EFL performance, the EFL Achievement Test developed by the researcher was applied. This test aimed to explore the progress the participants make during the English course in a prep EFL class at Gebze Technical University. Despite the lack of precise steps to follow during the process of constructing an achievement test, to ensure the quality of the test to be developed, the researcher of the present thesis followed the stages in the form of the composition of Turgut, Baykul (2012) and Ivanova (2011). Respectively, the process of constructing the achievement test followed the stages of stating the overall plan of the test, content definition, test specifications, item writing, test design, item reduction, piloting the test, scoring test responses, item analysis and forming the ultimate test. In this respect, based on the overall purpose of the test, the related curriculum, syllabus and criteria objectives were reviewed. Once the specifications regarding addressee, skills to include in the test, items to develop were set, items were written and designed into a test. To ensure the content and face validity of the test, two folded steps were followed. First, five EFL teachers from the university were asked to comment through evaluation of functions forms where they were asked to assign numbers to their opinions from 1 to 5 for each of the functions specified by the researcher. In the second fold, five experts in EFL from different universities were asked to evaluate the harmony between the designed test and the table of specifications. While 1 was standing for

"completely invalid", 5 was indicating "completely valid" in the form. They were also asked to comment on anything else that they find important to edit on the test or the table of specifications. Then, simple descriptive calculations in the form of mean and percentages were followed. As a result, the test looked like a valid measure of EFL performance of prep EFL learners at Gebze Technical university regarding the objectives specified with the mean score of 4,8 out of 5 according to 5 EFL teachers from the university. On the other hand, the experts' evaluations of the harmony between the items, functions and their corresponding stages at Bloom's taxonomy produced 4,3 out of 5 on content validity and 4,6 on face validity. After setting the validity of the test, the test was piloted with 38 students who were qualified to study at English Prep Schools of eight different universities (5 state and 3 private) in Turkey in 2016-2017. Scores held as a result of assessment based on the detailed scoring key were submitted to reliability analyses. These included items mean score, item standard deviation, the item difficulty and discrimination to guide the test developer to decide on the items that need to be kept, removed or edited (Turgut, Baykul, 2012). These analyses were run by Item and Test Analysis Program-ITEMAN. Then, the ultimate test was formed by including the items having difficulty (P) and discrimination (R_{pr}) indices within acceptable ranges. While accepting or rejecting the items for the ultimate test, the acceptable discrimination and difficulty ranges put forward by Turgut and Baykul (2012) as a composition of different views in the literature were adopted.

As a result of following the aforementioned steps of test construction including issues related to the validity and reliability procedures administered within the present study, the researcher developed and ensured EFL Achievement Test as a valid and reliable assessor of EFL prep learners' EFL performance at Gebze University (KR20= 0,91).

2.4.2. Semi-Structured Interview Form

Taking the commonly cited advantages of the flipped classroom model into account, the researcher, also as the teacher in the class, aimed to conduct a study informing the concerned bodies about a better EFL practice. In this respect, analyzing the participants' self-reported opinions about their flipped experience becomes significant to better understand the issue under the studied setting. With this aim of gaining insights into the participant experiment group students' perceptions about their flipped classroom experience, a semi-structured interview form was developed by the researcher. The reason behind the choice of this instrument as a way of data collection was that interview is not only a way to give the participants a chance to reflect on their experiences but also a way to gain knowledge from them (Kajornboon, 2005).

The researcher of the current study reviewed the related literature for the

questions asked the participants about their flipped classroom experiences. As a result, he came up with some draft questions. Following this, the draft form was sent to two experts from a language department for the relevance and comprehensibility of its language. The draft form was edited as a response to the suggestions made by the experts. Then after, an expert from assessment and evaluation, two experts from curriculum and education, an expert from educational psychology and another from English language teaching were consulted to comment on the face and content validity of the edited form. In a form, the experts were asked to circle the number that reflects their opinions best from "1 = completely invalid" to "5= completely valid" to give a statistical value for the content and face validity of the form. As a result of employing basic descriptive statistics, none of the items were found to be invalid. In other words, the form was validated with the mean score of 4,8 out of 5 indicating the semi structured form as a completely valid assessor of EFL students' perceptions of flipped classroom model in EFL.

To identify the interviewee, the *multiple variation sampling* was employed. In order to "present multiple perspectives of the individuals", the researcher uses this sampling to include "cases or individuals that differ on some characteristic or trait (Creswell, 2012, pp. 208-209). In this respect, the researcher interviewed with nine experiment group students developing differently from pre- to post- academic achievement test.

2.5. Data Collection

Based on the permission from Institutional Review of Board (IBR), the data for the study was collected in during the fall term of 2016-2017 academic year. During this period, the same syllabus was followed in both classrooms. The instruction lasted 15 weeks from September to December. To realize the aim of the experimental part of the study, the researcher followed Flipped Classroom Model in the experimental class while he adopted traditional lecture-based instruction in the control group. The data collected during the study was articulated by 41 students enrolled at foreign language (prep) schools at Gebze Technical University. Through a consent form, all the participant students were ensured that all individual performance was confidential and that they were free not to participate in the study or use pseudonyms and then volunteer students were asked to complete the aforementioned instrument.

2.6. Data Analysis

All the quantitative data was analyzed in six folds using Statistical Packages for Social Sciences (SPSS) 21 for Windows and Item and Test Analysis Program –ITEMAN 4. In the first fall of data analysis, the data acquired as a result of the administration of EFL

Achievement Test in the pilot study was exposed to item level and reliability analyses through ITEMAN 4. Independent Samples T-Test was run to equate two groups of students in terms of the pretest application results of EFL Achievement Test. On the other hand, Independent Samples T test was repeated to the differences between control and experiment group EFL learners' mean scores of *Achievement Test* while Paired Sample T Tests were run to indicate whether pre- and post-test mean scores of experiment and control groups differ significantly within themselves. The qualitative data of the study was manually following content analysis procedures including the steps to transcribe the data, code the data according to the pre-determined themes.

3. Limitations of the Study

The validity of the findings of this study is exposed to some limitations. First of all, the study was limited to 41 prep EFL learners in two different classrooms at Foreign Languages Department, Gebze Technical University in Kocaeli. Therefore, the number of the students in control and experimental groups made it impossible to generalize the results since a larger number of participants could have yielded to different and more accurate results. Regarding the time and cost issues, a study conducted with students exerts some constraints out of the control of the researcher. The place where the interviews and achievement tests were employed, the time and duration of answering the questions and the type of assistance provided were some of the conditions which were beyond the control of the researcher.

4. Findings

In this part, the results of the statistics will stand for each of the research questions respectively in the following tables. However, there are two types of test data, parametric and non-parametric each requiring different types of analysis. Therefore, the researcher aimed to form the basis on which he could adopt the best data analysis methods. Therefore, the researcher checked data in terms of the number of participants, measures of central tendency, normal distribution curves and further ran Kolmogorov Smirnov tests to test the normality of the distribution. In this way, the researcher aimed to compute relevant parametric or non-parametric tests on the data and ensure the validity of the conclusions drawn about the sample based on valid findings. The results of these analyses indicated the data distributed normally. On this ground, parametric tests were employed in order to answer the research questions of the study.

The qualitative data gathered as a result of interviews was analyzed manually following content analysis procedures including the steps to transcribe the data, code the data.

Research Question 1: *“Is there a statistically significant difference between pre- and post-test scores of the students in the traditional lecture-based classroom?”*

Separate Paired Sample T Tests were run to explore whether mean scores of the students in the control group differ significantly from pre- to post-test. The results were shown in the following table.

Table 3: Paired Samples T-Tests for EFL Achievement Test

Factor	Group	N	\bar{x}	S	Sh $_{\bar{x}}$	t-Test			
						t	Df	p	d
EFL Listening	Pre-test	20	12,05	3,268	,731	-3,106	19	,006	-0,79
	Post-test	20	14,70	3,373	,754				
EFL Grammar	Pre-test	20	9,75	4,756	1,063	-5,160	19	,000	-1,14
	Post-test	20	14,40	3,235	,723				
EFL Reading	Pre-test	20	10,30	4,543	1,016	-3,052	19	,007	-0,61
	Post-test	20	12,75	3,932	,879				
EFL Vocabulary	Pre-test	20	5,90	3,986	,891	-2,557	19	,019	-0,52
	Post-test	20	8,10	4,412	,986				
EFL Writing	Pre-test	20	12,65	4,416	,987	,616	19	,545	---
	Post-test	20	12,20	4,047	,905				
Total EFL Test Scores	Pre-test	20	50,65	17,027	3,807	-4,266	19	,000	-0,70
	Post-test	20	62,15	15,513	3,469				

The table summarizes the findings that indicate the impact of traditional lecturing on the EFL test performance of the students in the control group from pre- to post-test. Within this respect, the results indicate that control group students' post-test scores differed significantly from their pre-test scores in terms of total EFL achievement test ($t = -4,266$; $p < .001$) and its four sub-sections as listening ($t = -3,106$; $p < .01$), grammar ($t = -5,160$; $p < .001$), reading ($t = -3,052$; $p < .01$) and vocabulary ($t = -2,557$; $p < .05$). Moreover, proved by the mean scores in the table, all the significant differences were in the favor of post-test scores. However, as seen in the table, the students' scores of writing section did not differ significantly from pre- to post-test ($t = 616$; $p > .05$). Cohen's d values suggested moderate effect size of the significant difference in listening, reading, vocabulary and total EFL test achievement scores within the students in the control

group (.50<d< .80) and large effect of the significant difference in grammar scores of the students instructed traditionally from pre- to post-test (d> .80).

Research Question 2: *“Is there a statistically significant difference between pre- and post-test scores of the students in the flipped classroom?”*

In order to answer the second research question of the study and accordingly to explore how students differed from pre-tests to post-tests, six separate Paired Samples t tests were run. The results were shown in the following table as follows:

Table 4: Paired Samples T-Tests for EFL Achievement Test

Factor	Group	N	\bar{x}	S	Sh $_{\bar{x}}$	t-Test			
						t	Df	p	d
EFL Listening	Pre-test	21	12,00	3,271	,714	-5,567	20	,000	-1,24
	Post-test	21	15,76	2,773	,605				
EFL Grammar	Pre-test	21	8,67	4,768	1,040	-8,662	20	,000	-2,13
	Post-test	21	16,57	2,158	,471				
EFL Reading	Pre-test	21	9,48	3,696	,807	-6,541	20	,000	-1,90
	Post-test	21	14,76	1,300	,284				
EFL Vocabulary	Pre-test	21	5,29	4,113	,897	-5,567	20	,000	-1,64
	Post-test	21	10,38	1,465	,320				
EFL Writing	Pre-test	21	11,10	5,691	1,242	-2,620	20	,016	-0,75
	Post-test	21	14,57	3,218	,702				
Total EFL Test Scores	Pre-test	21	46,52	17,503	3,820	-7,268	20	,000	-1,89
	Post-test	21	72,05	7,586	1,655				

As a result, the table indicates the significant impact of flipped intervention on students' EFL test performance as a whole (t = -7,268; p <.001) and in all the sub-sections as listening (t = -5,567; p <.001), grammar (t = -8,662; p <.001), reading (t= -6,541; p <.001), vocabulary (t = -5,567; p <.001) and writing (t = -2,620; p <.05). Based on Cohen's guidelines (Ruscio, 2008), it was interpreted that flipped intervention resulted in a large effect size of the significant difference in listening, grammar, reading, vocabulary and total EFL test achievement scores within the students in the experimental group (d>.80). However, Cohen's d value suggested moderate effect size of significant difference in those students' scores of EFL writing (.50<d< .80).

Research Question 3: “Is there a statistically significant difference between post-test scores of the students in the flipped classroom and traditional lecture-based classroom?”

The students in two groups were found to be equal in terms of their pre-test scores. The researcher sought to explore the impact of the two types of instruction on the post-test scores of those students’ performance in EFL. Therefore, to reveal the impact of instructional design on EFL achievement, six separate Independent Samples t tests were run.

Table 5: Independent Samples T-Tests for EFL Achievement between Groups

Factor	Group	N	\bar{x}	S	Sh $_{\bar{x}}$	t-Test			
						t	Df	p	d
EFL Listening	Control	20	14,70	3,373	,754	-1,103	39	,277	----
	Exper.	21	15,76	2,773	,605				
EFL Grammar	Control	20	14,40	3,235	,723	-2,540	39	,015	-0,78
	Exper.	21	16,57	2,158	,471				
EFL Reading	Control	20	12,75	3,932	,879	-2,178	39	,040	-0,68
	Exper.	21	14,76	1,300	,284				
EFL Vocabulary	Control	20	8,10	4,412	,986	-2,200	39	,038	-0,69
	Exper.	21	10,38	1,465	,320				
EFL Writing	Control	20	12,20	4,047	,905	-2,082	39	,044	-0,65
	Exper.	21	14,57	3,218	,702				
Total EFL Test Scores	Control	20	62,15	15,513	3,469	-2,575	39	,016	-0,81
	Exper.	21	72,05	7,586	1,655				

The findings in the table depict the participant students’ quality of EFL performance under the impact of traditional lecture-based and flipped classroom instruction models. As a result, significant differences in the post-test mean scores of such sub-scales of EFL achievement test as EFL grammar (t= -2,540), EFL reading (t= -2,178), EFL vocabulary (t= -2,200), EFL writing (t= -2,082) were found between control and experimental groups with a moderate effect size (.50<d< .80; p <.05). On the other hand, total EFL scores also differed significantly between groups with a large effect size (t = -2,575; d= 0,81; p <.05). It is also important to state that all these significant differences were found to be in the favor of experimental group where the learners were instructed following a flipped classroom model. However, the participant students’ post-test scores of EFL listening did not differ significantly among groups (t = -1,103; p >.05).

Research Question 4: *“Is there a statistically significant difference in the durability of EFL achievement test performance between the students in the flipped classroom and traditional lecture-based classroom?”*

Six separate Independent Samples t tests were executed to explore the impact of instructional designs on the durability of EFL performance between groups.

Table 6: Independent Samples T-Tests for Durability of EFL Achievement

Factor	Group	N	\bar{x}	S	Sh $_{\bar{x}}$	t-Test			
						t	Df	p	d
EFL Listening	Control	20	13,40	3,2831	,7341	-1,204	39	,236	----
	Exper.	21	14,52	2,6762	,5839				
EFL Grammar	Control	20	14,60	1,7290	,3866	-2,754	39	,009	-0,85
	Exper.	21	16,14	1,8516	,4041				
EFL Reading	Control	20	12,65	3,8289	,8561	-2,266	39	,034	-0,72
	Exper.	21	14,67	1,1106	,2423				
EFL Vocabulary	Control	20	9,25	1,5174	,3393	-2,929	39	,005	-0,92
	Exper.	21	10,86	1,9567	,4269				
EFL Writing	Control	20	12,75	3,4469	,7708	-2,311	39	,026	-0,72
	Exper.	21	14,95	2,6168	,5710				
Total EFL Test Scores	Control	20	62,65	9,9539	2,226	-3,374	39	,002	-1,05
	Exper.	21	71,14	5,6946	1,243				

The figures in the table clearly indicate the enhancing impact of the flipped classroom instruction on the durability of EFL students' academic achievement ($p < .01; .05$). In other words, compared to the students instructed following a traditional lecturing model, students in the flipped classroom were found to be significantly better at retaining their performance in total EFL achievement test ($t = -3,374; p < .01$). Yet, their significant superiority was also apparent in such sub-scales of the test as EFL grammar ($t = -2,754; p < .01$), EFL reading ($t = -2,266; p < .05$), EFL vocabulary ($t = -2,929; p < .01$) and EFL writing ($t = -2,311; p < .05$). On the other hand, table 4.16 also reveals that type of the instructional design did not exert any significant impact on the durability of students' performance in EFL listening ($t = -2,311; p > .05$). Noting the ranges and guidelines provided by Cohen (1994), the flipped classroom instruction exerted moderately significant impact on the durability of EFL reading and writing test performance ($.50 < d < .80$). On the other hand, flipping the classroom for EFL students was explored

to have a large significant impact on the durability of performance in not only total EFL achievement test but also EFL grammar and vocabulary ($d > .80$).

Research Question 5: “Do the post-test scores of the students in the flipped classroom differ significantly according to their gender?”

To explore if male and female students’ performance differ significantly in the flipped EFL classroom, their scores were subjected to six separate Independent Samples t tests.

Table 7: Independent Samples T-Tests for the Impact of Gender on EFL Achievement

Factor	Group	N	\bar{x}	S	Sh $_{\bar{x}}$	t-Test			
						t	Df	p	d
EFL Listening	Control	12	15,5	3,529	1,019	-,490	19	,630	----
	Exper.	9	16,1	1,364	,455				
EFL Grammar	Control	12	16,6	1,303	,376	,228	19	,822	----
	Exper.	9	16,4	3,046	1,015				
EFL Reading	Control	12	14,8	1,467	,423	,284	19	,780	----
	Exper.	9	14,6	1,118	,373				
EFL Vocabulary	Control	12	10,0	1,651	,477	-1,409	19	,175	----
	Exper.	9	10,8	1,054	,351				
EFL Writing	Control	12	13,8	3,215	,928	-1,229	19	,234	----
	Exper.	9	15,5	3,127	1,042				
Total EFL Test Scores	Control	12	70,8	8,430	2,433	,841	39	,411	----
	Exper.	9	73,6	6,403	2,134				

As seen in the table, no significant difference in the post-test scores between male and female students in the experimental group was found. ($p > .05$). In other words, students’ performance in EFL was independent of gender in the flipped EFL classroom.

Research Question 6: “What are the EFL learners’ perceptions of their learning experiences in the flipped classroom?”

In the current study, the qualitative analysis started with transcription of the recorded data. Following it, the transcribed data was manually analyzed. Based on Creswell’s (2012) recommendations, the transcribed data was coded. Then, to provide the accuracy of the codes, the researcher asked the interviewee to reflect on these codes. After it was ensured that no codes would arise and all the codes and themes were

verified, their frequencies were calculated using SPSS 21 for Windows. These codes, formed with the consensus of the participants, were evaluated based on themes pre-determined by the researcher to stand for each of the questions in the interview. The interpretations and comments on EFL students' reflections on the role of flipped classroom in their EFL achievement were grounded in these themes and codes.

The researcher followed some common approaches reviewed in the literature to establish validity and reliability of qualitative findings (Creswell, Miller, 2000; Golafshani, 2003; Guba, Lincoln, 1982; Yıldırım and Şimşek, 2006). Thickly describing the setting, receiving feedback from the interviewee to confirm the codes formed out of their interpretations, triangulating the data through surveys and interview and peer debriefing are some approaches used by the researcher to ensure the reliability and accuracy of qualitative results.

Within this respect, the following table reflects on students' perceptions of the impact of flipped classroom on EFL achievement. While first five of the questions in the interview aimed to explore participants' perceptions of the role of flipped classroom in the main components of their EFL performance, the last one focused on the expansion of it into other courses.

Table 8: Categories and Codes for the perception of Flipped Classroom in EFL

Categories	Codes			
<i>Advantages of Flipped Classroom</i>	Varying teaching materials	Preparation for class	Easy to learn	Systematic approach
N	1	4	3	1
%	11,1 %	44,5 %	33,3 %	11,1 %
<i>Disadvantages of Flipped Classroom</i>	Technical		Unfamiliar	
N	8		1	
%	88,9%		11,1 %	
<i>Impact of Flipped Classroom on EFL Learning Style</i>	Studying regularly		Active participation	
N	7		2	
%	77,8 %		12,2 %	
<i>Impact of Flipped Classroom on time to study out of school</i>	Positive		Neutral	
N	8		1	
%	88,9 %		11,1 %	
<i>Flipping EFL classrooms</i>	Positive			
N	9			
%	100 %			
<i>Flipping other classrooms</i>	Positive		Doubtful	
N	6		3	
%	66,7%		33,3 %	

As seen in the table, these questions details the impact of flipped EFL classroom on academic performance by delving into its advantages and disadvantages, how it differed students' learning style and the time they spent out of school to learn EFL. Within this respect, the table indicates that most of the students, no matter how well they performed during the term, have positive attitudes towards flipping EFL classroom. Specifically, nearly half of the students (44,5 %) stressed that flipped classroom helped them a lot come to school ready for the class. As an example, they express this advantage of the instruction stating:

"Thanks to the presentations I watched and quizzes I took, I always went to school having studied the subject"

In addition to 1 student (11,1 %) who saw the positive side of flipped classroom instruction as the use of *"a rich array of teaching materials"*, another student stated that it made him *"study regularly and systematically since"* he *"knew what and how to come next"*. On the other hand, 3 other students (33,3 %) regarded flipped classroom as an instruction that made learning fun and easy by stating:

"By strengthening the relation between students and teacher, it makes us learn faster in a more comfortable atmosphere."

In terms of the disadvantages, except for 1 student who said *"I never been involved in such an instruction"*, all the other students (88,9 %) indicated technical problems such as poor network connection or smart devices as a drawback of flipped classroom by stating:

"I had some small problems. They are all, of course, about the internet and computer. Sometimes, I could not see the assigned videos. Sometimes it was difficult to take the quizzes on my smart phone when there is no computer."

Students were explored to think that flipped classroom changed their learning behaviors in two different ways. Firstly, most of them (77,8 %) pointed out flipping presentation and homework routine contributed to their learning stating

"It made me study regularly."

"Before I was studying once or twice for my exams. I was doing this for two or three days before the exam. I was getting tired a lot. Thanks to this instruction, studying for 15-20

minutes a day, I learnt everything about the content and I didn't need to study extra form y exam."

On the other hand, 2 students (12,2 %) helped them actively participate in the lesson since they had an idea about what they would learn in the classroom. They:

"By assigning continuous and little homework, it does not bore the students and foster student participation in the lesson."

The fourth question aimed to gain insights about how much time the students spent on EFL learning out of the school during the term when their course was flipped. As seen in the table, students' responses were coded as positive and neutral. On the contrary to 1 student who stated *"I can't say that I spend much time except for the homework."* 8 students (88,9 %) had positive ideas about flipped classroom thinking that it helped them manage their time better. Different ideas were expressed as in the following ways:

"It made me share time to study before I sleep."

"Since it helped me manage my time better and use it more productively, I learned a lot in a shorter time. It 50-60 % decreased the time I spent out of school for the lesson."

"I learn better and I spend less out of school."

All the students (100 %) reported that they support the idea of flipping EFL classrooms. They justified themselves in such similar ways as:

"I made me learn better"

"It must be used to facilitate student participation."

"I learned better by spending less time. Thanks to quizzes, I saw my mistakes and focused on them more."

In terms of flipping other courses, most of the students (66, 7 %) seemed to be hesitantly positive. They usually stated their opinions in a way similar to the following:

"I would like it to be used in other courses as well. But I am not sure if it works as well as in English."

"Yes I want. Because having idea about the course before the classroom makes it easier and funnier to learn".

However, 3 of the students (33,3 %) seemed to be hesitant about flipping courses other than EFL stating

"It may be useful for some verbal courses. But I am not sure about science and math classes."

"I would like but it may be illogical for all the courses."

As seen in the table, these first six questions detail the impact of flipped EFL classroom on academic performance by delving into its advantages and disadvantages; how it differed students' learning style and the time they spent out of school to learn EFL. Based on the results, it was better understood that flipped classroom model positively triggered university prep EFL students' academic performance and increased the time they spent to learn and study. In this way, these qualitative results were found to support the related quantitative results.

5. Results and Discussion

This embedded study grounded in a mixed method research design adopted flipped classroom model in teaching EFL courses of a prep class at Gebze Technical University for the whole process of 2016-2017 fall term. Adopting a traditional lecture based teaching approach in another classroom, the researcher aimed to examine the effects of flipped classroom model on not only EFL students' academic performance. The necessary data to achieve this aim was collected through implementation of EFL achievement test and enriched through semi-controlled interviews with nine students from three achievement groups in flipped EFL classroom.

Firstly, the results pointed out significant impact of flipped classroom intervention on total EFL performance and all its sub-skills with a large effect size. It was found that only students' EFL writing performance was moderately differed by flipped classroom instruction within experimental group from pre- to post-test administration. This moderate effect size of the intervention on EFL writing can be explained by Chamot's (2005) stress on it as the most difficult skill to improve among

EFL students regardless of their levels of language. The facilitating impact of flipped classroom model on EFL performance is supported by a number of studies across STEM subject areas across K-12 and higher education contexts such as science (Bergman, Sams, 2012; Reid, 2016), technology (Davies, Dean, Ball, 2013), math (Fulton, 2013;), in Language Arts (Fulton, 2013) and pharmacy courses (Ryan, 2013). On the contrary to this heavy reliance on the use of flipped classroom in STEM disciplines in generally K-12 contexts, *“little or no research to date has rigorously studied whether and how flipping the language classroom can enhance student learning”* (Hung, 2015, p.83). Furthermore, there seems to be a lack of efficient number of studies searching the effect of the flipped instruction on sub-skills in EFL. Yet, this limited related literature also provides consistent results with those of the current study that indicate the positive impact of flipped classroom on EFL students’ performance within experimental classroom. Engin (2014, p. 21) is one of a number of researchers who state that research in the related literature *“explored the effectiveness of the flipped classroom model”*. Farah (2014) also proved this positive impact of the instruction on EFL writing. In a master study conducted in United Arab Emirates K-12 context, the flipped classroom instruction resulted in significant improvement in writing performance within experimental group. In another study conducted with adult learners in an ESL course at a community college in US, Han (2015) explored that adopting a flipped approach improved students’ both oral fluency and grammar explanations. Similar to them, Leis, Cooke and Tohei (2015) showed facilitating impact of flipped classroom on EFL writing performance within experimental group in a Japanese higher education context. Another quasi-experimental mixed method study was conducted by Webb and Doman (2016) in two universities in the US and China. The results indicated that grammar scores in the post-test were significantly higher than those in the pre-test within experimental group. Hung (2015), on the other hand, compared students’ EFL performance in three different classrooms termed as *structured, semi-structured* and *non-flipped classrooms*. The results indicated that students in structured flipped classrooms outperformed those in other two classrooms.

To the researcher’s scope of interest, only 2 of 11 studies in Turkey conducted about flipped classroom were directly related to EFL. In this respect, the present research was thought to enrich the related literature through its results gathered from its mixed method design. As one of those two studies, Ekmekçi (2014), as a result of his doctorate study conducted in a higher education context in Turkey, supported the significant impact of flipped classroom model on EFL writing exploring significant progress in students’ EFL writing performance from pre- to post-test administration within experimental group. In the second and the last study conducted in Turkish higher education context, Boyraz (2014) indicated that the flipped classroom exerted a

significant impact on EFL grammar performance within experimental group with a large effect size. Although grammar covered only two structures as “reported speech” and “passives” in that study, there seems to be a perfect match between the results of that study and the related ones of the current study. As for achievement dimension, only one of the studies on the flipped classroom in various disciplines, reviewed by Bishop and Verleger (2013, p.12), was reported to “*examine student performance throughout a semester*”. By examining the role of flipped classroom in EFL for 15 weeks during the whole fall term, the current study fills an important gap in the literature. Furthermore, the study is proved to be in line with the general tendency in the related literature that shows triggering impact of flipped classroom on academic performance across different disciplines in different contexts. This can simply be attributed to the fact that “*technology is the important support to develop the students learning*” (Kitchakarn, 2015, p. 52) in today’s world where technology has become an indispensable part of educational settings.

Secondly, the study was primarily devoted to shed lights on the comparative impact of flipped classroom instruction and traditional lecture-based teaching on EFL learners' academic achievement and its sub-sections. As a result of running six separate Independent Samples T Tests, students’ EFL performance in all skill areas except for listening was significantly under the impact of flipped classroom instruction model. Students in the flipped classroom were found to perform significantly better than those in the traditional lecture based classroom. While the effect size of the difference in grammar, reading, vocabulary and writing was found to be moderate, that in overall EFL performance was explored to be large. These results of the current study seem to expand the related literature by applying flipped classroom to non-STEM disciplines. In addition to producing similar results to those studies grounded in non-STEM disciplines (Davies, Dean, Ball, 2013; Kim et al., 2014; Love, Hodge, Grandgenett, Swift, 2014; Mclaughlin et al., 2013; Moravec et al., 2010; Reid, 2016; Strayer, 2007; Zappe, et al., 2009), the present study produced results supported by insufficient number of studies conducted in international context (Ahmad, 2016; Al-Harbi, Alshumaimeri, 2016; Hung, 2015; Kang, 2015; Roth, Suppasetserree, 2016; Webb, Doman, 2016).

In terms of flipped classroom in EFL, Kang (2015) produced consistent results with the current study in a Korean EFL context by exploring that the flipped classroom was significantly more effective than traditional lecturing in improving students’ grammar, vocabulary and overall English performance. Contrary to this and current study, Al-Harbi and Alshumaimeri (2016) explored that flipped classroom did not exert a significant difference in students’ grammar performance in Saudi Arabian K-12 context. Al-Harbi and Alshumaimeri (2016) attribute this insignificant difference to some “*unique challenges of the Saudi context*” (p. 89), On the other hand, Hung (2015), in a

posttest-only quasi-experimental designed study, Hung (2015) found the students in the structured (totally flipped) classroom were found to perform significantly better than those in semi-structured and non-flipped classrooms. In terms of enhancing EFL students' listening abilities, the present study produced contrasting results with those of few studies in the literature (Ahmad, 2016; Roth, Suppasetsee, 2016). This contrast in the results can stem from the difference in the designs of the studies or participants' lack of practice in EFL listening since EFL listening includes many challenges for a EFL student, which can only be dealt with more and more practice.

On the contrary, to these studies in the international context, there are fewer studies conducted on the comparative impact of flipped classroom on EFL performance in Turkish context (Boyras, 2014; Ekmekçi, 2014). Conducted in a similar setting to that of the current study, Boyraz (2014) and Ekmekçi (2014) investigated the efficiency of flipped classroom in EFL grammar and writing respectively in higher education context. While Boyraz (2014) organized his study to include two structures in grammar that lasted for a few weeks, Ekmekçi (2014) applied the model during the whole fall term in 2013-2014 academic year. Despite some of their limitations, these studies also validated the results of the present study by statistically proving the superiority of flipped classroom to traditional lecture based classroom in fostering EFL performance.

To better understand the issue and come up with "information rich" data (Patton, 1990), it was aimed to gain insights about participant EFL students' self-reported opinions about their flipped classroom experience. This research question of the study does not promise to come up with unique results to expand the existing literature. However, it aims to increase the validity and generalizability of the results that explore learners' positive views of flipped classroom model within various subject areas (Ahmad, 2016; Boyraz, 2014; Chen, Yang, Hsiao; 2015; Ekmekçi, 2014; Hung, 2015; Roth, Suppasetsee; 2016, Strayer, 2009; Turan, 2015). In other words, tracing students' perceptions of flipped classroom through implementing flipped classroom attitude surveys or interviews following quantitative procedures is a frequently viewed feature of flipped classroom literature on both EFL and other disciplines. Hence, the present study served for strengthening the qualitative results about flipped classroom approach by exploring positive perceptions of flipping EFL classrooms among EFL students from different achievement groups. As another point, review of studies proves that the role of gender still remains unexplored in flipped classrooms (Chen, Yang, Hsiao, 2015). To fill this gap in the literature, the current study seeks the impact of gender on EFL students' performance in the flipped classroom and promises valuable outcomes that need to be supported by future research. The common trend in the results regards gender *"as an important affective factor that plays a specific role in and influences second language acquisition"* (Zoghi, Kazemi, Kalani, 2013, p. 1124). This significant difference is

usually cited in the favor of females revealing them as better EFL learners than males. Within this respect, grounded in a different context by embedding gender impact on flipped classroom environment, the current study contrasts with the common trend in the related literature by showing no significant gender impact on EFL performance.

To sum up, compatible to the general trend in flipped classroom research, the current study explored flipped classroom model as a significant facilitator of EFL performance in Turkey. This impact was found to be exerted thanks to "*action based, authentic, connected and collaborative, innovative, high level, engaging, experience based, project based, inquiry based, and self-actualizing*" activities flipped classroom model provides in the classroom (Hamdan et al., 2013, p. 17) and its feature "*allowing students to control the pace or stream of learning content*" (Ibrahim, Callaway, 2014, p. 21). Considering all these, the present study, adopting a mixed method design, committed to delve into the important dynamics of EFL performance in Turkey.

6. Recommendations

The present study promises valuable outcomes that guide the instructors and curriculum designers to come up with a new pedagogical model to enhance the quality of EFL teaching and learning processes at universities in Turkish context. The model turns out to be not as a cure for all types of educational problems but a strong potential to promote learning with a careful and an effective planning that will also embrace its possible constraints. The present study enlightens the concerned bodies in practice about all aspects of planning and implementation procedures for flipping an EFL classroom. In this respect, the present study serves as a proposal for flipped classroom as a viable pedagogical model that will both respond to learning and teaching needs in the 21st century and boost the psychological predictors of EFL achievement at higher education institutions in Turkey.

On the other hand, the flipped classroom's commonly cited superiority to the traditional approach signals a new trend in student learning and makes it inevitable to further study this hot call for pedagogical shift. Within this respect, based on the limitations of current study, the researcher also urges the future researchers to take the further steps to delve into this issue.

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