The Effect of Using Flipped Classroom Model to Improve Iraqi EFL Learners’ Pronunciation in English at University Level

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Abstract

For Iraqi EFL learners who are studying English pronunciation in a traditional instruction method often requires more effort and hard work. Thus, using new methods of teaching such as the flipped classroom model (FCM) is necessary to facilitate learning and improve performance. Hence, this study reports on explanatory research that investigates the effect of using the FCM in the teaching of English pronunciation for Iraqi EFL learners at the university level. The study implemented mixed research methods for data collection in a quasi-experimental analysis. Therefore, two tests were conducted on the assigned groups to measure the effect of the FCM before and after the intervention. Besides, a questionnaire and interviews were used on the experiment group students to collect data about their perceptions of the FCM. The study length (lasted) was 15 weeks and is comprised of 60 students from the department of English, College of Arts at the University of Anbar. The students were divided into two groups, experimental, and control with 30 students in each group. The findings revealed that there was a significant statistical difference between the two groups in favour of the experimental group with better performance, indicating that the FCM has considerably assisted the Iraqi EFL learners to improve their English pronunciation. Moreover, the students expressed their positive feedback and satisfaction on the use of the FCM in their responses to the questionnaire and the interviews. As such, the current study recommends further research to study the effect of applying the FCM in areas and disciplines other than language learning.

Keywords: Flipped Classroom Model, English pronunciation, Iraqi EFL learners, foreign language.
1. Introduction

1.1. Background of the study

Learning a second or a foreign language (SL/FL) for real-life communication normally requires using the language correctly and accurately in terms of grammar, syntax, pronunciation, and socio-pragmatic aspects. In the past, only some of these items were emphasized in SL/FL teaching rather than the teaching of pronunciation (Muhammed & Othman, 2018). However, in recent years, accuracy in pronunciation of SL/FL has become of much attention by many teachers and linguists (Brown, 2001). As such, different strategies were developed and used to improve not native-like pronunciation of the target language by the SL learners but rather instead to enable the learners to perform well in spontaneous speech (Brown, 1992 and Pawlak,
2010). However, these strategies according to Zhang et al (2016) have not always proved to be successful in the history of teaching, especially in the methods of teaching pronunciation. Students usually taught to learn pronunciation through audio recordings of the materials pronounced by native speakers and the students have to imitate what they hear of the learned language. In Iraq, this is the case for many EFL classrooms’ learning processes (Kadhim, 2017). Teachers, usually, assist their students in learning pronunciation of the target language through listening to short recordings in form of sets of words and vocabularies in isolation pronounced by native speakers to pick up the correct pronunciation of what they hear.

In traditional methods of teaching (face-to-face instruction) or as sometimes researchers call it “traditional lecture-based technique” (Bhuiyan and Mahmud, 2015, p. 8), teachers spend lesson time trying to explain and elaborate on the subjects’ materials to the students while they are busy writing notes from the teacher or copying materials from the board (Egbert et al, 2015). In these modes of learning, teachers mostly are the leader of the instructional design, setting, and the flow of knowledge, leaving the students as empty vessels that need to be filled. Thus, students’ oral performance is not developed due to the teacher’s influence and dominance over the class with little or no space for the students to practice (Al-Hosni, 2014; Abdullah et al, 2019). This, in consequence, create passive learners that have no part in the exchange of knowledge or the learning process (Shimamato, 2012). Similarly, in teaching pronunciation in EFL classrooms, the teacher is the only source of knowledge who has to provide the students with the information related to the pronunciation features, explanations, and knowledge, leaving no time for real activities and students’ engagement (Ayoub, 2006). This is done, to some extent, with judgmental feedback with no well-planned rehearse and practice (Qader & Arslan, 2019).

The rapid advance of new technology has triggered the path for the use of different instructional designs and techniques in the classrooms developed for many pedagogical purposes and learning methods. These techniques emphasize active learning and engagement through learner-centered approaches (Burke and Fedorek, 2017). Examples of these include blended
learning and its various techniques and models such as the flipped classroom model. These models, as proved by many studies (Delialioglu and Yildirim, 2007), have created a drastic change in how knowledge can be passed from teachers to learners, not in a traditional manner. They allow teachers to invest class time to practice activities rather than explaining materials for the first time (Kvashnina and Martynko, 2016; Kurt, 2017). Recorded instructional videos can be uploaded online on multiple platforms and watched by the students in advance to learn about the new subject materials. These techniques, at the same time, allow the students to have direct access to the learning materials from anywhere and review them as many times as they want with constant feedback from teachers and peers (Strayer, 2007). Henceforth, this makes teachers and the students use the time in the classroom to “explore, elaborate on the content, and interact with each other in ways that meet their learning needs” (Egbert et al, 2015, p.2). In pronunciation classes, class time then can be invested to practice the activities of pronunciation rather than exploring the materials for the first time. For instance, in Iraqi EFL classrooms, this can be a viable means for addressing an important issue of learning pronunciation through learners’ autonomy by validating the usefulness of the technology to overcome the current difficulties that the EFL students in Iraq face (Qader & Arslan, 2019).

In teaching, as a result of this new technological facilities and techniques, there has been an increasing emphasis by instructional theorists and educationalists to use technology in educational settings. Although, this is the case in many universities in Iraq and especially the University of Anbar, however, teachers and instructors still have the fear of bringing new technology to the classroom. Therefore, the current study emerges as a one to fill the gap of the effect using a form of new technology – the flipped classroom. Especially and more importantly, when using such techniques in teaching pronunciation materials are seldom or rare (Zhang et al: 2016). It is with an interest to apply this kind of study- using the flipped classroom to see the level of effectiveness on Iraqi EFL learners by which no previous studies have been conducted to meet this gap knowledge. Henceforth, the results of this study can have a valuable pedagogical impact on how new instructions in
Iraq can be improved, taught, designed, and at the same time, remove the fear of using new technology by teachers and instructors.

1.2. Statement of the Problem
Many problems in teaching pronunciation are still unsolved and traditional methods have not always proved to be effective in the teaching of pronunciation. Thus, there is a need to explore new methods to assist and improve the teaching of pronunciation in EFL classrooms. Hence, the current study aims to investigate the effect, applicability, and use of the flipped classroom to improve Iraqi EFL pronunciation accuracy in English at the University of Anbar, Iraq. It seeks to prove the validity and effectiveness of the new method of teaching – the flipped classroom over the traditional method in teaching English pronunciation in the teacher-learner learning process.

1.3. The Aims of the study
The present study seeks to achieve the following aims:

1. Investigate the effectiveness of using the flipped classroom model in the Iraqi EFL classroom in teaching pronunciation over the traditional way of teaching.
2. Identify the perceptions and feedback of the Iraqi EFL learners on the use of flipped classroom techniques for learning English pronunciation.

1.4. Research Questions
The current study is meant to answer the following questions:

1. What are the effects of using a flipped classroom model to improve Iraqi EFL pronunciation accuracy in English?
2. What is the perception of the Iraqi EFL learners about the flipped classroom model as a new form of the learning process over the traditional way of learning?

1.5. Rationales for the topic
The research is a self-experience result of 8 years of teaching English pronunciation and intonation at the department of English – faculty of Arts – University of Anbar. The subject of English pronunciation is taught in two
semesters as a basic subject in the first and the second year. After years of teaching this subject, however, it is quite evident that there is a need to change the way this subject is taught. Every year, more than half of the students fail to pass this subject as they struggle with the material. Although, students usually are allowed to take two exam attempts and sometimes three attempts at the end of the course.

That is being the case; the students were interviewed for the reasons of failing although there are many allowed attempts. The students reported complains about the time constraints or pressure in the class. They spend the time in the classroom taking notes from the teacher, not focusing on the teacher explanation itself, or having enough practice. Moreover, they also complained about the few occasions of discussions they have during class time because of time constraints. As such, the students asked for experiential learning where they can have a collaborative learning environment to share, explore, and give feedback on what they learn.

Therefore, and with a lot of encouragement from colleagues outside of Iraq, about the use of new technology inside the classroom, the researcher was motivated to use and explore the effectiveness of using flipped classroom techniques to improve Iraqi EFL learners in topics related to English pronunciation.

2. Literature review

2.1. Flipped classroom

The term flipped classroom comes along with the already used term of blended learning, which means, the use of technology in the classroom to facilitate learning and bringing new learning opportunities to the students (Baker, 2000). For some researchers, the term of the flipped classroom is just attributed to being a kind of blended learning where a class is reversed and recorded, then uploaded to the internet where the students can access it in anytime, anywhere and watch it many times (Staker & Horn, 2012). More specifically, the flipped classroom is defined by Khalil and Fahim (2017, p.6) as “an alternative model of instruction in which digital technologies are used to shift lectures out of the class hours in the form of screen-cast videos to introduce new concepts”. As such, the students have the opportunity to
review and prepare the class materials by themselves saving the vague points and topics that require a more in-depth understanding of the class time where the teacher works as a facilitator rather than as the online source of knowledge (Üğütten & Balci 2017). Thus, this model of instruction is used for multiple reasons and with different benefits.

The benefits of the flipped classroom model to the student is the opportunity of “participating in-class group and engaging in online video lessons and assignments that must be completed additionally outside the class time” (Santikam and Wichadee, 2018, p. 123-4). Moreover, the flipped classroom model supports the communicative approach of language learning by engaging the students in the learning process and have encouraged them to be autonomous learners (Butt, 2014). Furthermore, Egbert et al (2015) gave a more detailed description of the real value and benefit of using flipped classroom techniques by incorporating interaction with activities to have meaningful participation rather than busywork with focus on learning. Moreover, the flipped classroom makes learning more directed and personal rather than didactic, by which the students have more opportunity to acquire knowledge and at the same time to evaluate their learning (Alvarez, 2011).

2.2. Past studies

There is no doubt that there are many studies on the traditional methods of teaching pronunciation in the EFL classroom environment as well as its effectiveness. In the new era of technology and technological facilities in education, it is important to investigate technology validity and applicability to ensure its effectiveness in language teaching and learning. As such, studies of blended learning and specifically the flipped classroom are recent and concerned more with how it is implemented and what its benefits are (Gardner, 2012). Authentic studies on flipped classrooms are required to fill the gab knowledge of its effective use concerning the teaching of different language skills and materials. For example, improving pronunciation, learning content based instructions. However, ‘research is quite limited for each one of these fields’ (Kıroğlu and Çakır, 2017, p. 19).

Some other studies were mainly concerned with only one skill of a language. For example, Engin (2014) and Ekmekçi (2014) studied the
Effectiveness of the flipped classroom in teaching writing skills and students’ perception and performance (Leis et al. 2015, Santikam & Wichadee 2018) and Sung (2015) and Mehring (2015) on students’ attitudes towards flipped classroom model. Additionally, other researchers studied the use of flipped classrooms in topics other than language teaching. For example, Strayer (2007) studied it in relation to teaching mathematics, and Bishop (2013), for teaching the sophomore-level numerical methods course. While Overmyer (2014) used the flipped classroom to teach algebra. Generally, those studies show that the students were mostly in favor of using the flipped classroom technique over the traditional methods of teaching (Bergman & Sams, 2012), Kim et al, 2012). More specifically, the traditional methods of teaching in the Iraqi context is found to be the reason of students’ frequent errors due to class time constraint and fewer activities which also lead to students low level of motivation (Al-Mofti & Hussein, 2019) and enthusiasm and consequently boredom (Ayoub, 2006). As such, and with this topic in mind, there is a need to investigate the use and the effectiveness of new teaching methods such as the FCM in the Iraqi EFL classrooms to improve pronunciation that is almost either rare or almost non-existent to the researcher knowledge except a study on improving writing by Qader & Arslan (2019) on EFL students in the Kurdistan region of Iraq. Therefore, the current study can fill the gab knowledge in the teaching and the implementation of modern technology, especially the FCM. The results of the current study could have pedagogical implications for the teaching of pronunciation to the Iraqi EFL instructors and teachers.

3. Methodology

The current study employed a mixed-methods approach of both quantitative and qualitative analysis to answer its questions that were derived from the stated objectives. The approach was used mainly to reach reliable and valid answers to the research questions raised in this study. As such, a questionnaire, interviews, and tests were used for collecting data.

3.1. Design of the Study

To perform the flipped classroom model, an experiential (experimental) and control groups of students were selected. Both groups were taught
compulsory English pronunciation course by the same instructor for a whole semester of 15 weeks (see table 1 summary below). The flipped classroom model was conducted using recorded instructional videos uploaded on the Google classroom platform one week before the class date by the instructor so that the experiential group students had to watch them in their free time before the class time. The control group students, on the other hand, did not have access to the Google classroom platform nor to the recorded videos. The content of these instructional videos was the lectures that the control group received in a traditional manner in the classroom. Therefore, the experiential group students had very flexible time in their learning journey watching the videos of the lectures in advance, reviewing them as much as they want, and preparing their questions to raise in the class to their instructors and their peers while in-class. They spent their time leading activities and being more active as the topic of the sessions were already introduced and explained to them in the instructional videos that they received before the class time.

Table 1. Summary of the Research Design Process

<table>
<thead>
<tr>
<th>Experiential group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td>Pre-test Pronunciation test (for pronunciation performance)</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>Students introduced to the flipped classroom model and the google classroom.</td>
</tr>
</tbody>
</table>
| **Step 3** | a. Recorded instructional videos are recorded by the instructor and uploaded on the google classroom platform every week, one week before the session time.  
        b. The class time is full of engaging activities and learner-increased participation in a student-centered approach. |  
        a. Instructions are performed through a traditional teaching manner with the instructor presenting the class materials.  
        b. The students have no access to the recorded instructional videos on google classroom. |
| **Step 4** | a. The students are tested at the end of the intervention.  
        b. The students are asked to complete the questionnaire for their perception of the flipped classroom model.  
        c. 10 semi-structured interviews are conducted with 10 randomly selected students. | a. The students are tested at the end of the semester. |
3.1. Participants

The participants of the two groups, the experimental and the control groups were from the second year studying at the English departments, College of Arts, University of Anbar taking a basic course in English pronunciation. They were selected based on their verbal consensus. Both groups were of equal numbers and included 60 students, male and female. These two groups had a similar educational background and share the same educational knowledge. This was proved by a pre-test to both assigned groups.

3.2. Data Collection Instruments

A questionnaire with both open and close questions was designed based on previous research questionnaires by Mireille (2014), Umezawa at al (2018), and Qader & Arslan (2019). This questionnaire was developed and organized to suit the current study and data collection process. It comprised of two sections. The first section comprised of 10 items of Likert scale, 1-5 points, where 1 being strongly disagree while 5 strongly agree. Then, it was distributed at the end of the intervention to the students of the experiential group to identify their perceptions of the flipped classroom model. The data obtained were then analyzed and presented inferentially. While 4 open questions of the questionnaire were used with 10 students selected randomly for semi structured-interviews from the experiential group. The data of the interviews was then coded into sections and analyzed qualitatively to explore in-depth the influence of the flipped classroom model. Moreover, a pre-test in English pronunciation was conducted before the intervention to both assigned groups to ensure that their level in English pronunciation is the same. This test consisted of three main parts, single word pronunciation (sound discrimination and comparison), reading words in contexts, and participation in real-life speaking conversations respectively. The post-test was conducted at the end of the intervention to both groups. It comprised of three parts containing materials related to English pronunciation with topics of phonological features such as stress, intonation, and aspects of connected speech materials taken from the textbook “English phonetics and phonology” by Peter Roach (1995). This is also the same textbook that the control group
was taught with in a traditional manner. Both the instructor and the researcher conducted the tests and the students were assessed using the criteria of assessing pronunciation in the IELTS speaking: Band Descriptors. Then, the scores were given according to the IELTS assessment scheme for each student. Finally, the results were analyzed and represented inferentially through statistical descriptive analysis to measure any differences and similarities between the assigned groups in tables in the data analysis section of the research below.

4. Data Analysis

The results of both tests were scored by the instructor and the researcher for each student based on the assessment criteria of pronunciation in the IELTS rubric. Then, an independent sample t-test was carried out to examine any statistical similarities and differences between the two groups’ test scores shown in the findings section below. On the other hand, the data collected from the first 10 items of the Likert scale questionnaire were calculated and analyzed with the percentages of each item in table (4). Similarly, the qualitative data obtained from the semi-structured interviews were classified using inductive content analysis and analyzed and coded into themes and categories. This kind of data helped the research to have an in-depth exploration of the results obtained through the Likert scale items of the questionnaire.

4. Findings

The first question of the current study, as stated earlier, probed the effects of using the FCM to improve EFL pronunciation. Therefore, two tests were conducted and a descriptive analysis was provided for each groups’ score as shown below.

4.1. The effects of Using FCM on the Iraqi EFL learners’ pronunciation in English

To ensure that both assigned groups in the current study share the same level of English pronunciation proficiency, a pre-test was conducted individually in English pronunciation by both the instructor and the researcher using the IELTS pronunciation descriptor scoring scheme for each student. After that,
in independent-samples t-test was conducted on the scores obtained to present descriptive and inferential analysis comparing the two groups’ mean values to see the similarity in proficiency level between the students of each group. The following table (2) is used to present the mean results of the two groups:

**Table 2. The descriptive statistical analysis in the pre-test**

<table>
<thead>
<tr>
<th>The compared groups</th>
<th>The experiential N=30</th>
<th>The control N=30</th>
<th>Statistical Values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>The scores results</td>
<td>3.78</td>
<td>1.34</td>
<td>3.44</td>
</tr>
</tbody>
</table>

From table (2) above, it can be observed that students’ proficiency in pronunciation of both groups, the experiential and the control is almost the same. The mean values are 4.78 and 4.44. The reason for conducting the pre-test was to ensure that there are no educational differences between the students of each group so the intervention would have statistical value if any difference is found in the post-test results. In other words, both group students are of the same level in English pronunciation to some extent before conducting the study on the effects of the flipped classroom model.

In order to examine the influence after the intervention on the experiential group, a post-test was conducted on both assigned groups to measure any statistical differences after the application of the FCM on the experiential group. As such, an independent-samples t-test was employed to analyze the students’ scores obtained from the post-test results. Therefore, the following table (3) is used to present the results obtained from the post-test:

**Table 3. The descriptive statistical analysis in the post-test**

<table>
<thead>
<tr>
<th>The compared groups</th>
<th>The experiential N=30</th>
<th>The control N=30</th>
<th>Statistical Values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>The scores results</td>
<td>5.89</td>
<td>1.28</td>
<td>4.31</td>
</tr>
</tbody>
</table>

The independent t-test results in table 3 above shows that there are significant statistical differences in the post-test mean between the experiential and the
control groups in favor of the experiential group as a result of the FCM intervention on the experiential group. The mean value of the experiential group increased significantly in the post-test from the pre-test with 2.11 increase in values as shown in figure (1) below:

![Graph showing differences in mean values between the experiential and control groups](image)

**Figure (1) Differences of Mean Values in pre and post-tests between the assigned groups**

Figure (1) indicates that there is a statistical difference between the mean values of the two groups supported by the statistical values presented in table (3), the values (T=2.048, P= 0.046) in the post-test. Hence, the differences in mean values and other statistical values are attributed to the FCM intervention.

### 4.2.1. Students’ Perceptions of the FCM

In order to measure the Iraqi EFL learners’ perception about using the FCM in English pronunciation course, a Likert scale questionnaire with 1 being strongly disagreed and 5 being strongly agree was distributed to the experiential group students at the end of the FCM intervention. Henceforth, the results obtained from the students' responses were calculated and described statistically in the descriptive statistics table 4 below (see Appendix I for more details of the students’ responses). It is observed from the table...
that all the students’ responses supported the use of FMC in the teaching of pronunciation rather than the traditional methods of instruction and they were probably “ready to study in a new learning environment” (Santikam and Wichadee, 2018, p.). Moreover, the results support the post-test results that the FCM has improved the learning achievement of the students and having better learning opportunities. The mean values of all the 10 items of the questionnaire showed that the students’ responses were positive and strongly agree to these items. On the other hand, very few students responded with ‘disagree’ for the items about the usefulness of using the FCM. Table (4) below is used to present the descriptive statistics obtained from the questionnaire:

<table>
<thead>
<tr>
<th>Table 4. Descriptive Statistics obtained from the Likert questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
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<tr>
<td>-------</td>
</tr>
<tr>
<td>1.</td>
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<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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<td>7.</td>
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<tr>
<td>8.</td>
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<tr>
<td>9.</td>
</tr>
<tr>
<td>10.</td>
</tr>
<tr>
<td>Valid N</td>
</tr>
<tr>
<td>Mean average</td>
</tr>
</tbody>
</table>

It is also observed from table 4 above that items 7, and 8 mean values have the highest score among the other values with 4.00 and 3.90 respectively.
While item 6 that asks the students if the FCM is more engaging than the traditional manner of teaching, most of the students agree to that with a mean value of 4.00 as shown in figure 2 below. Thus, it means that FCM is a good environment for the effective interaction of the students with the learning materials besides harnessing learners’ autonomy (Zainuddin and Perera (2017). It is important to have students’ opinions about a learning approach and its effectiveness. The data obtained and analyzed from the current study has shown that learners’ autonomy is highly increased by this approach as they can learn at their own pace. Subsequently, it is also observed that other items’ mean values of the questionnaire were high and in favor of the FCM. For instance, the mean values of items 9, 5, 3, and 1, are almost the same with values from 3.77 to 3.70. This is a thorough approval of the students’ positive attitudes and satisfaction for the new method of teaching.

In item 8, the mean value is 3.90 and comes second after item 7 of the questionnaire. 22 students out of the 30 students in the experiential group were consent and 12 students responded with ‘agree’ while 10 responded with strongly agree (see figure 2 below). The results obtained about the FCM advantage in increasing students’ motivation for EFL performance are supported by a study conducted by Abdullah et al (2019). Figures 2, 3 below are used to show the high frequencies of responses to item 7 and 8 respectively:

Figure (2) Frequency of item 7
4.2.2. Students’ Responses in the Semi-Structured Interviews

Ten students from the experiential group were selected randomly and interviewed for their perceptions and attitudes about the FCM intervention. The questions of the interviews were derived from the questionnaire distributed to the students and they were grouped to ask about:

1. What is your perception of the effectiveness and usefulness of the FCM?
2. What are the benefits of using FCM for studying and learning English pronunciation?
3. What are the drawbacks and disadvantages of using FCM?

The students’ answers to the questions above in the semi-structured interviews were coded into themes and they are presented in table (5) below:
Table 5. Students’ main themes obtained about the use of FCM

<table>
<thead>
<tr>
<th>Questions</th>
<th>Themes</th>
<th>Participants</th>
</tr>
</thead>
</table>
| 1. What is your perception of the effectiveness and usefulness of the FCM? | - It is very useful, the materials are easily accessed from any place at any time. We had the opportunity to learn interestingly and funnily.  
- Flexible learning time  
- Overcome shyness and the feelings that hinder from participating in the class sessions. | 7 students 78% |
| 2. What are the benefits of using FCM for studying and learning English pronunciation? | Students overall learning process improved and increased significantly. English pronunciation improved and students became engaged and motivated to study. | 8 students 87% |
| 3. What are the drawbacks and disadvantages of using FCM?               | - Sometimes students faced internet connection problems during the watching of the instructional videos  
- Some people are novices in using modern technological tools. | 2 students 20% |

The qualitative findings of the FMC intervention in teaching English pronunciation revealed that the majority of the students had positive consequences on their learning journey because of the new teaching methods, the FCM. The semi-structured interviews were mainly conducted to validate the results obtained from the quantitative findings.

Generally, the overall findings of the qualitative data support the findings obtained from the quantitative data. Over 78% of the students confirmed that using the FCM had allowed them to be more engaged in an active learning environment. This is supported by the students’ comments on the benefits of the FCM in the learning process. Students 1, 2, 6, seemed to support the findings in table 5 above on the first question themes. Their answers were more about the positive attributes of the FCM. Some of their answers are presented below:

**Student 1**

“The FCM allowed me to learn at my own pace and view the content of the videos as many as I want. I am usually shy in the classroom and do not dare to participate in the activities”
Student 6

“At home, I feel that I learn the class materials through teaching videos more quickly and easily before the class session in the classroom because it is a quiet environment. Also, I take notes from the videos where I keep all the vague points, those materials that I do not understand to discuss them with the teacher in the classroom.”

For question two that is related to improving English pronunciation, over 87% of the students responded positively with enthusiasm and confidence that the new intervention, the new method of teaching, is something that they had not experienced before and it benefited them having the ability to practice materials in advance and sparing time of the class for more engagement activities. As such, their level significantly improved. Students 4 commented about question two in the following way:

Students 4

“The FMC had drastically increased our motivation to study collaboratively on the tasks and activities presented in the class by the teacher as were already grasped the materials in advance. This had made us have enough time for more activities administered by the teacher and received his feedback on them.”

Although the students had a very positive attitude about the FCM, some of them around 20% were discouraged by some technical issues such as the internet slow connection and problems. They have complained that when the internet is slow, it is not easy to stream and watch the videos. Student 9 reported these internet disconnection problems, while students 10 had only reported some logistical problems of being a novice in using technology. He also complained that they have always been taught using the traditional manner of teaching, so studying with FCM requires more training and exposition in advance to its application.

4.3. Discussion of findings

In this quasi-experimental study, both data obtained quantitatively and qualitatively were mainly collected to answer the raised objectives. The data obtained from the English pronunciation tests of the two groups determined that the students who received the class materials through the FCM achieved higher and better scores than those who received it in a traditional manner of teaching. These results were supported by the questionnaire and interview
results where the students expressed their positive attitudes, perceptions, and satisfaction with the way that FCM made learning and studying more easily, with better engagement, and with time flexibility. The students were more motivated to learn and had effective interaction with the material and their peers.

Similarly, the results of the current study are consistent and align with the findings of the previous studies about language skills learning. The students’ satisfaction and positive perception of the FCM as an effective and engaging method of learning has been the findings of some recent studies by Fisher et al. (2018), Ekmekci (2017), Blair et al. (2016), Nouri (2016), and Mireille (2014). In these studies, the common goal among them was to validate the FCM in different EFL contexts except the teaching of English pronunciation. Therefore, the current study aligns its finding with these studies in terms of the effectiveness of using FCM in the teaching of English pronunciation and the students’ high aptitude for learning and autonomy.

This increase in the aptitude of learning is attributed to many reasons. According to Qader & Arslan (2019, p. 51) the ‘students’ mental input increases when methodological instruction is changed and enhanced to fulfill their necessities and demands”. Thus, language learning for the students becomes simpler and easy, and with multiple input channels. The different activities inside and outside the classroom had encouraged the students to be active and engage with the materials throughout the course. Their performance in the post-test was distinguishable from those who were taught in the traditional instruction. The pronunciation rules and features of phonetics and phonology were grasped with accuracy and developed remarkably.

5. Conclusions and implications for future studies
Throughout the current study, the effect of the FCM and students’ perceptions were investigated in different ways. Firstly, through real two tests to evaluate the benefits of the intervention and then followed by a questionnaire with interviews. This triangulation of the two methods implemented was both validating the findings and completing each other’s results. Subsequently, the outcomes of the data collected and analyzed helped to answer the two questions raised in this study.
It is concluded that the students’ overall results in the post-test conducted after the FCM intervention consolidated the hypothesis by many previous studies that the students’ language performance improves in the area that the FCM was aimed to improve. The results showed that the FCM had significantly impacted the students’ performance in the English pronunciation materials in comparison to those students taught in traditional instruction. This can be attributed partly to the amount of language exposure the students have before, during, and after the class. Class time is allocated to do multiple and different language practice activities rather than a theoretical explanation as in the traditional lecture-based teaching method. Teachers can investigate the class time guiding their students on tasks and activities and also provide formative assessment strategies such as feedback (Al-Mofti, 2020). Furthermore, the Iraqi EFL students’ responses to the questionnaire were mostly in favor of the new teaching style, the FCM. As a matter of fact, they even expressed their satisfaction for the FCM through the interviews and showed their enthusiasm for new methods of learning such as the FCM. They felt more active, engaged, independent, motivated, and having control over the class materials the opportunity to preview and prepare everything before class time.

It is generally observed that technology has become an important part of today's classrooms. Its benefits exceed its application uses in various aspects of our life and especially in education. Therefore, it is hoped that both teachers and students on a larger scale and setting be receptive to the implementation of new technology, for instance, the FCM.

5.2. Implications for Further Studies

The current study has many recommendations drawn from its conclusions. Firstly, it is observed that the FCM applicability in the teaching of SL or FL is still limited. As such, based on the findings of the current study, it recommends that FCM is used in the teaching of language skills in a wider scope. Also, there is a need to investigate the use of FCM from teachers’ perspectives as well as in other disciplines. Teachers’ role is important in the teaching process, thus, their perspective is important. Besides, the applicability of the FCM in other disciplines other than language learning is a topic worth investigating in academia.
References


Appendix (I) results obtained from the questionnaire distributed to the experimental group

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The flipped classroom helps me to learn the content of the class in advance.</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>I can understand the class content more easily through the flipped classroom model.</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>The flipped classroom improves my English pronunciation level</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Through the flipped classroom, there is enough time to review the materials in self-pacing learning opportunity.</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>I am more confident of the class materials because of the flipped classroom</td>
<td>1</td>
<td>2</td>
<td>9</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>The flipped classroom allows me to do more activities in class.</td>
<td>0</td>
<td>5</td>
<td>9</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>The flipped classroom platform is more engaging than the traditional classroom.</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>I am more motivated to learn English pronunciation in the flipped classroom</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>None of the class materials is lost or forgotten through the flipped classroom</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>The flipped classroom helps to promote cooperation among the learners.</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>9</td>
<td>7</td>
</tr>
</tbody>
</table>