Investigating the Effect of Flipped Classroom Model on Kurdish EFL University Students' Reading Skill

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Abstract*— Technology has great effects on all the fields of science, including language teaching. Flipped Classroom Model, a relatively new method of teaching with strong ties with technology, has recently gained popularity and drew the attention of many educators. Several previous studies in various fields of science, including language teaching, show the effectiveness of Flipped Classroom Model (henceforth FCM) in developing students' achievement. The current study aims at investigating the effect of Flipped Classroom Model on Kurdish EFL university students' reading skill. It also aims at revealing the impact of Flipped Classroom Model on developing students' autonomy and motivation. It further aims at finding out to what extent the students are satisfied with FCM employment in their classes. The participants of the study were 60 first-year students of English Department, College of Education, Charmo University. The study took place in the second semester of the academic year 2021-2022. The students were divided into two equal groups, a control group (n. 30) and an experimental group (n. 30). The same syllabus was taught to both groups by the same teacher (researcher 1) for 15 weeks. Three methods were used to collect the required data which were pre- and post-tests, a questionnaire and an interview. The SPSS analyses of the test results revealed significant differences between the two groups' achievements in favor of the experimental group (t= -3.306, P= .002). Moreover, the questionnaire and interview results clearly showed that the experimental group students have positive perceptions on FCM implementation in their classes. Furthermore, the questionnaire and interview results showed that Flipped FCM implementation developed the students' autonomy and motivation to study. The study recommends utilizing FCM in teaching other skills and sub-skills such as speaking, writing and grammar.

Index Terms— Flipped Classroom Model, Reading Skill, Autonomy, Motivation, Achievement, EFL Students.

I. INTRODUCTION

Methods of language teaching should reflect the era's requirements and necessities. Nowadays, life is inseparable from technology since technology has a dramatic role in every field of science. To meet the demands of the twenty-first century, Flipped Classroom Model (Henceforth FCM) emerged and gained much popularity in the past few decades.

A. Definitions of Flipped Classroom Model

FCM has been known by other names such as inverted classroom (Bates and Galloway, 2012), backward classroom (McLaughlin et al., 2014), upside-down classroom (Zhang et al., 2014) and reversed classroom (Halili and Zainuddin, 2015). Similar to these different names, there are different definitions for FCM. Bergmann and Sams (2014) as two pioneers of FCM believe that there is not one definition that might suit every context of teaching. Bergmann and Sams (2012, p. 13) define FCM as anything that is "traditionally done in class is now done at home, and [anything that] is traditionally done as homework is now completed in class." Moreover, according to Educause Learning Initiative (2012, p. 1) flipped classroom is "a pedagogical model in which the typical lecture and homework elements of a course are reversed. Short video lectures are viewed by students at home before the class session, while in-class time is devoted to exercises, projects or discussions". Furthermore, in Johnsons et al.'s views (2013 cited in Sun and Wu, 2016), FCM encompasses two major phases. In the first phase, students receive knowledge through internet without temporal or spatial constraints, while in the second phase students internalize the materials studied through student-student and student-teacher collaborations and interactions. Likewise, Flipped Learning Network (FLN) (2014, p. 1) defined FCM as "a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive, learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter."

In sum, in flipped classroom model, the instructor prepares and video records anything that needs to be lectured. If the teacher cannot video-record it for any reason, they might obtain suitable videos about that specific topic from YouTube or other channels and send them to the students in advance to prepare

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them before the class period. And the class period is used for discussing the materials, answering any questions raised, exercises, projects, student-student and student-teacher interactions and collaborations.

A point that arises is that FCM is not synonymous with 'online learning', and 'blended' or 'hybrid' learning. They are totally different from FCM. In online learning, there are usually no or very few face-to-face activities between the students and the teacher. While in FCM classrooms, there are numerous engaging, active and hands-on activities in the classroom between the students themselves on the one hand, and between the students and the teacher on the other. Moreover, even though there is a mixture of online and in-person classroom activities in blended or hybrid learning, compared to FCM's inside-classroom activities and exercises, there are fewer face-to-face interactions between the students and the teacher (Fuster, 2016 cited in Roehling, 2018).

B. Emergence of FCM

FCM emerged officially with two American teachers, Jonathan Bergmann and Aaron Sams, who started recording their video lessons and sending them to their students a few days before the actual class time (Bergmann and Sams, 2012). Nevertheless, the idea of flipping goes back to a long time before that date. In 1991, Eric Mazur, a Harvard University physics professor, used a similar approach of teaching called 'Peer Instruction' in which his students were required to study the textbook and the teacher's notes before the class time; and in class, they had discussions about the content of the materials read by students (Mazur, 2013). Similarly, Lage et al. (2000) proposed using computer VCR to present information outside the classroom to their students. Besides, in 2001 'Open Educational Resource' was opened by Massachusetts Institute of Technology (MIT) which provided students with books, videos and other materials, so they can study them prior to class time (Bishop and Verleger, 2013). In addition, in 2008, Salman Khan, an MIT graduate, created an online resource for students called 'Khan Academy' that offers free tutoring videos to students on various fields of science (Ash, 2012). Furthermore, in 2012, Bergman and Sams created an online resource called Flipped Learning Network (FLN) that offers help to those teachers who flip their classrooms (Handen at al., 2013 cited in Logan, 2015). In a nutshell, the idea of flipping classrooms goes back to the past few decades and its employment in teaching various fields of science, including second/foreign language teaching, grows day after day.

C. Teacher and Students' Roles in FCM

Teacher and students' roles change from one method of language teaching to another due to many factors. Compared with the traditional methods of language teaching where teachers were considered to be the centre of the class and their commands were fulfilled by students obediently without negotiation, the new methods of language teaching give new roles to teachers and students. Teachers, in the new methods of language teaching, have other roles such as facilitators and guides rather than transmitters of knowledge (Larsen-Freeman and Anderson, 2011). In Richards' (2006) view, in the recent methods of language teaching, teachers attempt to create an environment where students can interact with one another and the material to construct meaning. King (1993) emphasizes that in today's era teacher's role should change 'from sage on the stage to guide on the side'.

In FCM, collaboration and cooperation among the students on the one side and students and teacher on the other are focused upon. According to Educause Learning Initiative (2012, p. 2), "during the class sessions, instructors function as coaches or advisors, encouraging students in individual inquiry and collaborative effort." The teacher facilitates active learning by assisting and guiding their students while they engage in hands-on activities in the classroom (Zainuddin, 2017). Moreover, Basal (2015, 30) asserts that in FCM "the role of the teacher has changed to a guide, facilitator and organizer. With all these roles, a more student-centred classroom environment can be created, paving the way for students to achieve a more active role in their learning." Furthermore, in FCM, students' learning becomes more individualized and personalized; consequently, the students become more motivated and autonomous in their learning process (Qader and Arslan, 2019).

Thus, it is clear that FCM, as a relatively new method of teaching, tries to meet the needs of 21st century students. In FCM, students are considered the centre of learning, and everything is done to facilitate them to get engaged, interested, motivated and become autonomous in their studies.

D. Advantages of Flipped Classroom Model

FCM, as a contemporary method of teaching, is believed to have many benefits and advantages. Bergman and Sams' views are presented first as two pioneers of FCM. According to them (2012, 2014) the following are the major benefits of FCM:

- FCM speaks today's students since it focuses on using technology to benefit students. Undoubtedly, today's students are generally technology literate. Consequently, they can easily access the video lessons sent to them by their teachers.
- Students can watch the videos sent to them at their own pace.
- It helps the struggling students since the teacher will have a good time walking around the class and helping the struggling ones.
- Students of all abilities benefit from FCM since they can watch the videos as often as they need and/or pause and rewind them as much as they require.
- FCM increases student-student and student-teacher interactions and collaborations.
- Teachers can individualize their teaching to meet individual needs since they have plenty of time in the class. Thus, positive differentiation can be made between the students depending on the students' needs.
- FCM also helps absent students and teachers. When a student is absent from class, they can watch the videos at their pace. Or when a teacher is absent, they can still send their videos to the students; so the students do not get behind in their studies.

To support this view, it is believed that in FCM classrooms, the interaction period among the students is increased (Fulton, 2012) and the teacher can utilize the spared extra time to meet the learning and emotional needs and demands of the students (Goodwin and Miller, 2013). Along the same line, many supporters of FCM assert that FCM employment solves traditional teaching problems such as the lack/shortage of students' engagement, participation, and interaction, as well as solving the lack/shortage of proper feedback by teachers in the class (Basal, 2015; Hung, 2015; Obari and Lambacher, 2015). Besides, FCM is considered advantageous in motivating students to self-learn outside the class and encouraging them to participate in classroom activities and exercises (Hung, 2015). Moreover, FCM implementation is believed to allow teachers to invest the increased time in the classroom to benefit students through letting the students practice more in the class activities (Kvashnina and Martynko, 2016; Kurt, 2017). Furthermore, Millard (2012) believes that FCM effectively increases students' engagement, strengthens team-based skills, offers personalized student guidance and provides time to teachers and students for classroom discussions and collaborations. Likewise, to Gannod et al. (2008), FCM is beneficial since the students are generally provided with immediate feedback in the classroom in case of having questions, doubts and misunderstandings. On the other hand, the weaker students are specifically looked after as the teacher has ample opportunities in the classroom to meet individual students' needs. In Farah's (2014) views, in FCM, students have the opportunity to learn by doing since learning is individualized, rather than just learning theoretically about the topic. In sum, there are lots of benefits of FCM and all students take benefit from it, no matter if they are advanced learners or struggling ones.

E. The Reading Skill

Reading has become a part of almost everybody's daily life, including students. Technology, e.g. Google, YouTube, social media …etc., made a strong link between people and reading. Every day, millions of books, articles, reports, comments and other forms of writing are read by various people worldwide.

In terms of learning English by second/foreign language students, reading skill is regarded as one of the most important skills that gained popularity and interest in the past few decades, if not century. McDonough and Shaw (2003) consider reading skill to be the most crucial skill for foreign language learners; specifically where students need to read a lot of materials in English for their own major while they might not need to use the language at all. To Grabe and Stoller (2002), in order for students to be successful academically, they have to develop their reading skill because it has a critical role to academic success. Besides, Snow et al. (1998), and Krashen and Brown (2007) assert that improving one's reading skill facilitates improving one's overall language efficacy. In a similar vein, Scrivener (2011, p. 268) believes that "the more someone reads, the more they pick up new items of vocabulary and grammar from the texts… this widening language knowledge seems to increase their overall linguistic confidence, which then influences and improves their skills in other language areas." Moats (1999 cited in Westwood, 2008) goes even further by stating that all the success of formal education relies on one's reading skill. Those who do not master reading skill appropriately, it is highly likely that they do not master other skills; and consequently, they will not develop in their education.

In sum, reading skill is an important skill for all students including second/foreign language students. The more someone reads, the more they improve their reading skill which inevitably helps improving other skills as well. Hence, language teachers are expected to expose their students to numerous types of reading passages for various purposes so that students can broaden their horizons and have good background information about various topics and themes.

F. Previous Studies

Dozens of studies show the effectiveness of FCM in improving ESL/EFL students' language skills and/or demonstrate the students' positive views on implementing FCM in their classes; however, some studies' results indicate no significant difference between FCM and Traditional classroom students' achievements.

The studies of Leis et al. (2015) on composition writing, Zhang et al. (2016) on vocabulary, Abaeian and Samadi (2016) on reading comprehension, Ahmad (2016) on listening comprehension, Kirmizi and Komec (2019) on vocabulary, Al-Naabi (2020) on grammar, Qader and Arslan (2019) on writing skill, Al-Mofti (2020) on pronunciation, Samiei and Ebadi (2021) on reading comprehension, Khoiriyah (2021) on listening comprehension all showed that FCM classroom students did better than the traditional classroom students. Besides, students also showed positive perceptions of FCM utilization in their classrooms. On the other hand, the studies of Al-Harbi and Alshumeimeri (2016) and Alhamami and Khan (2019) on reading skill did not show any significant difference between FCM and traditional students' achievements; rather their results were almost the same. Further, the study of Jalili et al. (2020) on vocabulary showed a different result. Contrary to the above studies, the students of the control classroom outperformed their counterparts in the FCM classroom, and the students showed a negative view about FCM. Similarly, Chaqmaqchee's (2021) results showed that students prefer the didactic traditional teacher-centred teaching over FCM.

Compared to the previously mentioned studies, the current study not only raises research questions on students' achievements and their perceptions on FCM, but also tackles other variables such as FCM's effect on enhancing students' motivation and autonomy. In addition, an important point that may distinguish this study from the previous ones is that in this study all the video lessons used are self-recorded by the researcher while the majority of the previous studies used ready-made videos from YouTube or other platforms. Besides, there are not many studies on the reading skill, whereas there are hundreds on the writing skill. Furthermore, this study is more comprehensive since the few previous studies on reading (to the best of the researchers' knowledge) just studied FCM's effect on enhancing students' reading comprehension while the current study investigates FCM's effect on enhancing students' reading comprehension ability plus enhancing other sub-skills or strategies such as previewing, skimming, scanning, paragraph parts identification and vocabulary improvement such as synonyms, antonyms, phrasal verbs and collocations.

II. Methodology and Research Design

This study took place in the second semester of the academic year of 2021-2022. The participants of the study were 60 first-stage students of English Department, College of Education, Charmo University, Kurdistan Region of Iraq. The students were divided into two equal groups of 30 students, (experimental and control). Two teaching models were used with the students, FCM with the experimental group and traditional model with the control group. So, the study's independent variables are FCM and Traditional models of teaching, whereas both groups' achievements are the study's dependent variable. Besides, the FCM students' perceptions of FCM and its role in enhancing their motivation and autonomy are also other dependent variables of the study. Both groups were taught reading skill as a core subject by the same teacher-the first researcher. Thus, both groups studied the same syllabus and content over 15 weeks of the semester.

A. Aims of the Study

The current study aims to:

1- Find out the effect of employing FCM on Kurdish EFL students' reading skill;
2- Reveal FCM's effect on enhancing the students' motivation;
3- Reveal FCM's effect on enhancing the students' autonomy;
4- Show students' perceptions and satisfaction about employing FCM in their classes.

B. Research Questions

The research questions of the current study are as follows:

1- What is the effect of FCM on enhancing Kurdish EFL students' reading skill?
2- What is the effect of FCM on developing Kurdish EFL students' motivation?
3- What is the effect of FCM on developing Kurdish EFL students' autonomy?
4- What are the Kurdish EFL students' perceptions of FCM?

C. Hypotheses

The current study hypothesizes that:

1- FCM employment enhances Kurdish EFL students' reading skill significantly.
2- FCM develops Kurdish EFL students' motivation.
3- FCM develops Kurdish EFL students' autonomy.
4- Kurdish EFL students hold positive perceptions of FCM employment in their classes.

D. Procedure

A few months before semester two of the academic year of 2021-2022, the first researcher started recording 15 videos about the reading skill subject. The length of the videos varied between 12-18 minutes. The content of the video lessons were all related to developing the students' reading skill and vocabulary. The video lessons' topics included previewing a text, skimming, scanning, identifying parts of a paragraph, parts of speech, tips to improve vocabulary, understanding and answering WH questions, reading aloud technique, prefixes, suffixes, collocations, synonyms, antonyms, phrasal verbs, word families, effective use of dictionaries.

In the first lecture of semester two, the experimental group students were introduced to FCM, how it works, and the requirements of its implementation. Also, the students' consent was taken to take part in the data collection process. The students of the experimental group (n. 30) were divided into six groups, each including five students. The control group students were taught traditionally, while the experimental group was taught through FCM. Each week, the experimental group students were sent a video lesson through Google classrooms a few days before the actual class time, so they had time to watch it well and write their notes and questions about the content of the video. To guarantee that the students watch the videos, every lesson started with a quiz about the video lesson content and there were marks on the quizzes. After the quiz, the students' questions and comments were discussed in the class collaboratively. Then a number of engaging and hands-on activities took place mostly through group work and fun-based group competitions. Generally, a fun and entertaining atmosphere was created in the class that the students enjoyed most. The teacher's role changed from authority or director of the class into a guide or facilitator. He moved around the class monitoring students' engagement in the activities, giving instant feedback to students' questions and formatively assessing their understanding and learning.

E. Data Collection Tools

A variety of tools has been employed to collect the required data, including pre- and post-tests, a questionnaire and an interview. Using both qualitative and quantitative methods of data collection helps guarantee the data's validity and reliability; thus, it is highly recommended (Marshall and Rossman, 1999; Punch, 2005; Johnson et al., 2007 cited in Brown, 2014).

1) Pre- and Post-Tests

The researchers designed a pre-test in which most of the items were taken from the syllabus that was studied (Q Skills for Success: Reading and Writing, Level Two, 2015, 2nd ed.). To ensure face and content validity, the pre-test was pilot tested with nine students. As a result, a number of pitfalls were detected and fixed. Pilot test is vital to identify the pitfalls that may exist in the items (Mackey and Gass, 2016). Besides, Dörnyei (2007) believes that the pilot test guarantees the validity and reliability of the data regarding their quality. In addition, a rubric was also designed by the researchers to score the pre-test results. The rubric was sent to 10 jury members, who were PhD holders in the field of either applied linguistics or linguistics, to obtain its validity. The jury members' responses were considered and their suggestions were followed. In the first week of semester two, the pre-test took place with both groups of students. They had the same questions and time period which was 90 minutes. On the other hand, in the last week of the semester (week 15), the students took part in the post-test with the same design, clarity and difficulty. Similar to the pre-test, the post-test passed through pilot testing; its validity was gained through jury members as

the pre-test and the same previously mentioned rubric was used for scoring it. Lastly, both tests were scored internally by the subject teacher (first researcher) and by an external teacher from University of Sulaimani to guarantee inter-rater reliability.

2) Questionnaire

Based on the studies of Farah (2014); Alsowat (2016) and Aljaraideh, (2019), a Likert-scale questionnaire that consisted of 10 statements was designed by the researchers. The statements were designed in a way that helped much in addressing the research questions of the study. The students were given the paper questionnaire in the final week of their semester. There were three options to be ticked for each statement: disagree, neutral and agree. The questionnaire was also pilot-tested prior to its administration.

3) Semi-Structured Interview

Based on the existing literature, the researchers designed a semi-structured interview. Twelve students of the experimental group (40% of the whole experimental group population) took part in the interview. The questions were designed and directed to answer the research questions. The researchers' neutrality was obtained by staying neutral and unbiased while directing the questions to the interviewees (Dörnyei, 2007).

III. RESULTS

Below, the results of the three methods of data collection are presented:

A. Pre- and Post-Test Results

Both groups' of students took part in a pre-test in the first week of semester two of the academic year 2021-2022. The test period was 90 minutes for both groups equally. After the test completion, the test results were scored by the subject teacher (first researcher). For guaranteeing the scorings' inter-rater reliability, the test papers were scored externally by another lecturer from University of Sulaimani. Then both scorers' scorings were sent to a statistician and their reliability was guaranteed. Finally, the means of both groups' results were compared employing an independent sample T-Test.

Table 1: Pre-Test Results

	Group	N.	Mean	Standard Deviation	d.f.	T. Value	P-Value
Reading Skill Pre-Test Results	Control	30	41.350	16.4367	58	.158	.875
	Experimental	30	40.667	17.1582			

Pre-Test results' table shows no statistically significant difference between the experimental and control groups students' achievements, though control group students did slightly better than experimental group students.

On the other hand, both groups' students took a post-test the last week of semester two around the end of June, 2022. Similar to the pre-test, the post-test results were scored internally and externally and its reliability was guaranteed. The results were compared through employing another independent sample T-Test as follows:

Table 2: Post-Test Results

	Group	N.	Mean	Standard Deviation	d.f.	T. Value	P-Value
Reading Skill Post-Test Results	Control	30	59.267	16.7681	58	-4.252	.002
	Experimental	30	72.583	14.3383			

Through a quick comparison between the means of the pre- and post-test results, one can clearly notice a statistically significant difference between the achievements of both groups in favour of the experimental group. It can be detected that the control group students' means increased from (41.350) in the pre-test into (59.267) in the post-test, whereas the experimental group students' means increased from (40.667) in the pre-test into (72.583). So, in terms of SPSS, there was a statistically significant difference between both groups' achievements (t= -3.306, P= .002) as experimental group students outdid their counterparts in the control group.

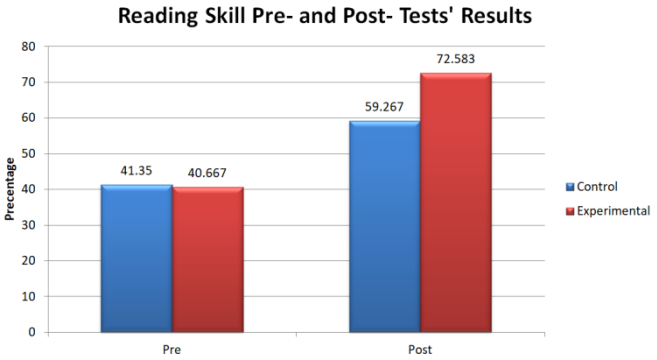

Figure 1: Both Groups' Achievements in Pre- and Post-Tests

B. Questionnaire Results

There was a 10 statement questionnaire in which the participants were given three options to tick: disagree, neutral and agree. The statements were related to the participants' perceptions about the role of FCM in developing their reading skill, motivation, autonomy and general satisfaction with the FCM. The results are presented in the table below:

Table 3: Questionnaire Results

	Statement	Disagree	Neutral	Agree
1	I understand more in the flipped classroom after watching the videos.	3 (10%)	0 (00%)	27 (90%)
2	Flipped classroom videos and classroom activities enhanced my vocabulary a lot, which is helpful to improve my reading skill.	1 (3.3%)	1 (3.3%)	28 (93.3%)
3	Flipped classroom is very helpful to improve my reading skill.	3 (10%)	1 (3.3%)	26 (86.7%)
4	Flipped classroom made me depend on myself more and helped	4 (13.3%)	3 (10%)	23 (76.6%)

	in becoming an autonomous learner.			
5	Getting instant feedback from the teacher in the flipped classroom is very motivating.	2 (6.7%)	4 (13.3%)	24 (80%)
6	I enjoy the group work activities that I do with my peers in the flipped classroom.	2 (6.7%)	0 (00%)	28 (93.3%)
7	I am very happy with the integration of technology and multimedia resources in the flipped classroom.	4 (13.3%)	4 (13.3%)	22 (73.3%)
8	When I work with a group of students in the flipped classroom, I feel more motivated.	2 (6.7%)	0 (00%)	28 (93.3)
9	In flipped classroom, I can control my learning through studying when, where and how I want to study.	1 (3.3%)	3 (10%)	26 (86.7%)
10	Language games and activities which are used in the flipped classroom create a friendly and enjoyable environment for the students in the class.	1 (3.3%)	0 (00%)	29 (96.6%)

Hence, Table 3 shows the questionnaire results in which students' answers to the statements clearly support utilizing FCM in their classes.

C. Semi-Structured Interview Results

Thematic analyses were used to present the data gathered from the interview. The key points of students' answers were gathered around a number of themes as follows:

Table 4: Interview Results

Questions	Themes Emerged	Major Answers	No. of participants
How helpful was FCM to improve reading skill?	FCM's effect on improving reading skill	It was very useful to improve my reading skill.	9 interviewees (75%)
		It was very good for improving vocabulary, synonyms, antonyms, phrasal verbs, collocations.	12 interviewees (100%)
How motivating was FCM to make you study harder?	FCM's effect on enhancing students' motivation	FCM was very motivating. Group works and exercises were beneficial and fun. Group competitions were very motivating.	12 interviewees (100%)
		Using technology (mobile phone) for learning was motivating. Taking responsibility of learning creates motivation.	
How did FCM help you rely on yourself and become autonomous ?	FCM's effect on enhancing students' autonomy	FCM made me rely on myself more than before. When I watched a video and did not understand something, this made me watch other videos, search online, watch YouTube or Google for the answer, ask help from my friends. It made me rely on myself and my friends.	11 participants (91.66%)
How do you find the flipped classroom model in general?	The students' perceptions about FCM and its advantages.	FCM was beneficial and enjoyable. FCM made the relationship among the students stronger and we learned a lot from one another.	10 interviewees (83.33%) 9 interviewees (75%)
		In the beginning I did not like it, but later I found it interesting and useful.	2 interviewees (16.6%)
		The inside classroom exercises were fun and enjoyable.	9 interviewee (75%)
		I like to be taught through flipped classroom in the future.	11 interviewees (91.66%)
		I prefer the other subjects also to be taught through flipped classroom.	6 interviewees (50%)

IV. DISCUSSION AND INTERPRETATION

The data obtained from the tests and the questionnaire were analysed through SPSS. Nevertheless, the data gained from the interview were thematically analysed. As shown in Tables 1 and 2, there were statistically significant differences (P<.05) between the means of control and experimental groups students' achievements in the benefit of the experimental group students. Obviously, pre- and post-test results show that experimental group students outperformed their counterparts in terms of academic achievement in the overall reading skill. To further clarify, the means of the control group students increased from 41.350 in the pre-test to 59.267 in the post-test, whereas the experimental group's means increased from 40.667 in the pre-test to 72.583. Through mathematical calculations between both groups' achievements, it can be found that the control group students' means increased 17.719 marks in the post-test while the experimental group students' means increased 31.916 marks in the post-test. Thus, the achievement difference between both groups is 14.197 marks in favour of the experimental group students which is a significant difference.

Regarding the effect of FCM on enhancing students' reading skill, the study's results confirmed FCM's effectiveness in enhancing Kurdish EFL students' reading skill and showed a dramatic difference between both groups' achievements in favour of the experimental group. The results align with several previous studies including Abaeian and Samadi (2016) and Samiei and Ebadi (2021) on improving EFL students' reading comprehension. In addition, Kirmizi and Komec's (2019) results demonstrated FCM's effectiveness in improving EFL students' vocabulary as an important sub-skill of the reading skill. Moreover, FCM's effectiveness has also been confirmed

in improving other language skills, sub-skills and other areas of language. Many previous studies demonstrated FCM's effectiveness, including the studies of Basal (2015), Al-Harbi and Alshumaimeri (2016), Al-Naabi (2017), Ekmekci (2017), Zainuddin (2017), Saglam and Arslan (2018), Qader and Arslan (2019), Aljaraideh (2019), Al-Mofti (2020) and many others.

FCM classroom students' distinguishing results in their reading skill are further supported quantitatively and qualitatively by students' answers to the questionnaire and interview. In the questionnaire, 26 students (86.7%) accepted that FCM was very useful for improving their reading skill (statement 3). Besides, 28 students (93.3%) confirmed that FCM improved their vocabulary, consequently affecting their overall reading skill (statement 2). This result is further supported qualitatively by the interview answers. Nine interviewees out of 12 (75%) stated that FCM was very useful to enhance their reading skill. Besides, all the 12 interviewees (100%) confirmed that FCM was very beneficial and effective to improve their vocabulary. Interviewee 8 stated that "flipped classroom model was very good for reading skill; especially for improving vocabulary. It helped much in improving my vocabulary, synonyms, antonyms, phrasal verbs and collocations." In addition, interviewee 10 stated that "it was very good for learning new vocabulary. It was good to learn how to answer the questions that follow reading comprehension passages."

This significant achievement by the experimental group students could be attributed to FCM implementation. The students took great benefit from the video lessons that they received prior to class time. Interviewee 2 stated that "when I watched the videos at home, I used to write down all the points raised in the videos… Also, I learned a lot inside the class … I learned from my friends." Additionally, interviewee 3 stated, "we actually had more activities in the classroom and consequently we learned more." This is in agreement with Brame's (2003) view that in FCM students learn Bloom's two lower levels of learning (remembering and understanding) at home and develop other four levels in the class through practice and group work activities. Besides, FCM as a new model of teaching has strong ties with technology. Today's students are technology literate and can easily get adapted to utilizing technological tools. In other words, the students were satisfied with integrating technology with learning. Interviewee 12 stated that "[FCM] is good because it is a modern style of teaching. I haven't experienced it before." Interviewee 3 stated that "it was very motivating because it was a new thing for us." In the same vein, interviewee 4 stated that "when I watched the videos, sometimes I stopped and wrote notes about the content of the videos. This made me try to learn more by watching other videos." So, there is motivation in novelty and students love experiencing new methods of learning. In other words, technology literate students would like integrating technology with learning as a novel way of teaching and enjoy it. Furthermore, students' interactions, group work and competitions in the classroom could be viewed significant in improving the students' achievements. This is in line with Ur (1991) that group work activities boost motivation and learning outcomes and independence. This result is also consistent with the principles of constructivism that students learn from interactions, experience and reflection (Vygotsky, 1978 cited in Bereiter, 1994; Kumar and Teotya, 2017).

Another important point that contributed in the success of FCM in this study could be the teacher's exploitation of the extra class time saved to create a friendly and enjoyable atmosphere to the students, to give instant feedback to students and to individualize their teaching (Overmyer, 2014). Thus, the first research question is answered and the first hypothesis is validated that FCM has a great impact (at least in this study's context) on enhancing Kurdish EFL students' reading skill.

In regard to FCM's effect on improving Kurdish EFL students' motivation, a quick review of the questionnaire and interview results clearly demonstrate that the students' motivation was greatly enhanced. The statement 8 results demonstrated that 28 students (93.3%) assert that they feel more motivated when working in groups. Undoubtedly, the majority of the class time was spent doing group work activities, thus it had a great role in improving the students' motivation, and consequently led to greater achievement. Moreover, statement 5 results clearly showed that 24 students (80%) point out that getting instant feedback from the teacher during the class activities was very motivating.

On the other hand, this is further supported by the interview results. All the interviewees (100%) stated that FCM effectively enhanced their motivation. Interviewee 2 stated that "flipped classroom motivated me a lot to study. For example, when we worked in groups and there were competitions among the groups … this made us cooperate more among ourselves." The sources of motivation in the FCM could have ties to a number of factors such as the integration of technology in teaching and learning, competitions among the groups, students' taking responsibility of their own learning and fun-based activities that were carried out in the class. These results are in line with Farah (2014), Han (2015), Basal (2015), Kang (2015), Qader and Arslan (2019), Zainuddin (2017), Aljaraideh (2019) and Al-Mofti (2020) that FCM improved their students' motivation. Similarly, Kang (2015) and Hung (2015) further claim that the sources of motivation are the activities and exercises which take place in the classroom while implementing FCM. Moreover, Ur (1991) asserts that group work activities boost motivation, learning outcomes, and independence. Hence, the second research question is answered and the second hypothesis is validated that FCM enhances Kurdish EFL students' motivation.

Concerning the effect of FCM on enhancing students' autonomy and self-reliance, statement 4 results in the questionnaire clearly demonstrated that 76.7% of the students agree that FCM made them depend on themselves more and helped them become autonomous learners. In addition, this is further supported by interview results that 11 students out of 12 (91.66%) claimed that FCM implementation made them rely on themselves, their peers and technology. In a similar vein, interviewee 4 stated that "when I did not understand something in the videos, I used to search online for extra information; or ask my friends to help me." In addition, interviewee 8 declared that "[FCM] makes the students rely on themselves and make better preparation." Further, interviewee 10 points out, "[FCM] made us not rely on our teacher, but technology and friends." These results are consistent with many previous studies about the effectiveness of FCM in improving students' autonomy

(Horn, 2013; Farah, 2014; Basal, 2015; Ekmekci, 2017; Qader and Arslan, 2019; Al-Mofti, 2020).

Regarding the factors that made the students autonomous, it could be claimed that the use of group work and the hands-on activities performed in the class had roles in making students autonomous, that is, through relying on their own and their friends' abilities, not only the teacher. The efficacy of group work and hands-on activities in enhancing students' autonomy is mentioned by many interviewees. This view is consistent with Harmer (2007) and Ur (1991) that group work activities enhance students' autonomy and self-reliance. Hence, it can be stated that FCM principles and implementation procedure had a good role in making the students autonomous and they started relying on themselves, their peers and technology. In other words, the teacher had the role of instant feedback provider and guide, so the students were partially reliant on the teacher. Furthermore, their preparation at home and their use of online technology such as Google and YouTube to get external information put them on the path of autonomous learning. In the interviews, students clearly stated that watching the videos at home made them watch other videos and search online for more information. This was one way of relying on themselves, rather than their teacher alone. Hence, the third research question is answered and the third hypothesis is validated.

Concerning students' overall satisfaction with FCM implementation in their classes, the questionnaire and interview results demonstrated that students generally have positive views about the effectiveness of FCM. For example, 27 out of 30 (90%) students agreed to statement 1 that they understand more in the class after watching the videos. In addition, 29 out of 30 (97%) students confirmed that language games and activities utilized in the flipped classroom create a friendly and enjoyable environment for students. This perception is further supported by interview answers as well. 10 out of 12 (83.33%) students declared that FCM was beneficial and enjoyable. Moreover, 9 out of 12 (75%) stated that FCM activities strengthened the relationship among the students and consequently learned a lot from one another. Interviewee 3 stated that "I found it good. In the beginning I was not sure if the students will get used to it and get benefit from it; but with the passing the time they got better and better." Hence, since FCM is a new style of teaching, it seems that it needs much time and effort to make the students get used to it. In addition, interviewee 4 states "in the beginning, I really hated this type of teaching; but as it continued, I got used to it and enjoyed it. I think it is better for all of us. I made new friends. When we were doing the exercises together in the group, we were very happy." Additionally, interviewee 9 stated that "FCM is a good way of teaching because students can study more and have more time to study. You can stop the videos and re-watch them." Further, 11 out of 12 (96.66%) of the interviewees stated that they would love to be taught through implementing FCM in their classes. Hence, it is generally clear that students positively perceive FCM and its implementation in their classes. This result is consistent with several previous studies including Basal, (2015), Al-Harbi and Alshumeimeri (2016), Ekmekci (2017), Zainuddin (2017), Aljaraedeh (2019), Al-Naabi (2020), Al-Mofti (2020), Samiei and Ebadi (2021) and many others. Many factors could have made the experimental group students have positive views on FCM. Firstly, their significant progress in reading skill and getting high marks in the exams could be one major factor behind their satisfaction with FCM. Secondly, their enjoyment of FCM classroom exercises such as group work and pair work activities and competitions could be viewed as another factor as they already mentioned that FCM strengthened relationships among the students. Thirdly, the integration of technology in the process of teaching and learning could be another factor since today's students are technology literate and spend much time daily surfing internet and social media. Hence, the fourth research question is answered and the fourth hypothesis is validated.

CONCLUSIONS

In this study, FCM implementation to teach reading skill to first-year students gained great success compared to the traditional teaching model. This great success of FCM could be attributed to many factors; the major ones are presented and discussed here. Firstly, students' exposure to the materials through video lessons prior to actual class time could be regarded as an important factor. Students received the video lessons a few days before class; thus, they had ample opportunities to watch them, re-play, re-wind, forward and backward as often as needed. They were required to write questions and/or comments about the video lessons' content; that is to tackle and discuss them in the class. This made the students almost ready for the class quizzes, discussions and hands-on activities. Secondly, the procedures and techniques of FCM made the students more motivated and self-reliant. In other words, requiring the students to watch the video lessons by themselves was passing responsibility of learning to them. This step made them watch other videos and check for other external information on the same topic. Thus, for them, the teacher was not a spoon-feeder anymore, the students became self-reliant, rather than teacher reliant. Besides, the active and hands-on activities in the classroom that included group works, pair works and group competitions made the students enjoy the new atmosphere created to them, and consequently, their motivation enhanced. Thirdly, another important factor could be the teacher's role in FCM classes. The teacher was not an information transmitter anymore; rather, he was a guide, facilitator, instant feedback provider, and formative assessor. Thus, it is highly likely that changing the teacher and students' roles played vital roles in the success of FCM. Fourthly, having a quiz at the beginning of every single lesson in the class obliged the students to watch the video lessons properly before coming to class. There were marks on the quizzes, thus, the students took the matter seriously. So, this can also be regarded as another factor assisting FCM's success.

Last but not least, the study recommends employing FCM to teach other skills and sub-skills such as writing, speaking, grammar and vocabulary; that is to obtain extra confirmation of FCM's effectiveness in teaching other skills and sub-skills.

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