The Effect of Using the Strategy of Flipped Class on Teaching Arabic as a Second Language

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Abstract—Teachers in classrooms use many strategies and methods so to make students able to communicate. Amongst these strategies is the strategy of the flipped learning which is the focus of the study in hand. This study focuses on two points; first, it deals with the theoretical part of this strategy. Second, it sheds light on the effect of using this strategy in the classes that taught Arabic as a second language. To assess the effect of this strategy, the researchers of the study in hand conducted a research study on foreign students who studied Arabic. They are in the first and the second levels in the languages centre/ Jordan University. The study also includes the students of the American Middlebury program in Jordan University who were in the second and the third levels. The quasi experimental method was applied on the study sample who were (120) students during a length of five semesters. By conducting a pre-test and post test for each group, the effectiveness of the flipped class strategy on students' performance in learning Arabic language was evident. The experimental group that studied based on the flipped class achieved higher degrees than the control group who studied based on the traditional method. This means that learning Arabic language based on the flipped class strategy enhances students' abilities towards learning Arabic language better than before.

Index Terms—Quasi Experimental Method, Flipped Class, Arabic language as a second language.

I. INTRODUCTION

The recent age has witnessed rapid development at the level of knowledge and technology. It is for granted that this development will reflect on the teaching process. Therefore, it is a must for those who work in the educational field to reconsider the methods and strategies used in teaching and learning. They have to find new methods and strategies and start applying them in their classes.

The application of the flipped class strategy traced back to 1998 when Walvrood and Johnson (1998) encouraged the use of this strategy by giving students a chance to have a look at the educational content at home and then dedicate the time of the class for discussion, analysis and problem solving. The strategy of the flipped class is considered one of the strategies that go along with the modern teaching instructions, giving students more chances for effective participation during class time in addition to connecting classes with real life outside the class (Stone, 2012). This strategy came so to break rules that surrounded the teaching process. It broke its inflexibility making it more interactive and enhanced participation between students and their teacher.

At the beginning of applying this strategy, students are the main focus in the teaching process before conducting the class. During the class, there is a kind of interaction and participation between the students and the teacher, and amongst students themselves.

A. Research Ouestions

The main objective behind this study is to know the effect of using flipped class strategy in the classes of teaching Arabic as a second language. The researchers of the study in hand tried to find answers to the following question:

- 1. What is the effect of using flipped class strategy in the classes of teaching Arabic as a second language?
- 2. Are there any differences between teaching Arabic by using the traditional methods, and teaching Arabic by using the strategy of the flipped class?

B. The Importance of the Study

The importance of this study lies in figuring out the essence of the flipped class, its main basis that is depends on, how it is used in the classes of Arabic as a second language, identifying its positives and difficulties once it is applied,

clarifying the stages of applying it in the classes of the second language in addition to observing its effect in the classes of Arabic as a second language.

II. LITERATURE REVIEWS

Many studies touched on how flipped class strategy is used in teaching other languages like Arabic, English or any other language. However, few studies focused on teaching the second language using this strategy. Lage et al. (2000) studied the effect of using flipped class strategy on the students' motivation towards learning. They planned a training course for a material in economy that was taught based on flipped class. They provided students with different tools like readings in the textbooks, videos, PowerPoint presentation with voice comments and printable PowerPoint slides so to help them inquire information from outside the classroom. This guaranteed that students would prepare beforehand. After that, some time was dedicated to do activities that encouraged students to process and apply the principles of economy. Those include lectures that answer students' questions, economic experiments and group discussions. The reaction of students and teachers was positive. Teachers pointed out that students were more excited than they were when the training course was taught by using the traditional method.

Gerald (2014) was concerned in figuring out the effect of using the strategy of the flipped class in teaching Algebra course in Colorado University on the students' academic achievement. Gerald applied his study on two groups; the first is experimental consisted of (135) student. Those studied Algebra based on flipped class strategy. The second is the control group. It consisted of (166) student who studied Algebra based on the traditional method. A final achievement test was done to students who studied based on this strategy before and after the strategy is applied. Results showed that there were no statistically significant differences in the grades of the students in the two groups. However, results of the students who studied based on the flipped class strategy were a little bit better than those who studied based on the traditional method.

Ali (2015) conducted a research study that aimed at knowing the effect of flipped class based on the quasi-experimental method making use of the achievement test. The sample consisted of (36) student who were pursuing higher diploma in Special Education in Abdul-Aziz university. Results revealed that there were statistically significant differences in the grades of the students who studied based on the flipped class strategy.

Hasan (2015) conducted a study entitled "FaSilliyat Namoðaj AttaSalom Al-Maqloob fii itaĥseel wa Al-?adaa? limaharaat AttaSom Al-ilktrouni lada tollaab talabat Al-Bakalorious bi kuliyyat Attarbiya ". The sample consisted of (115) student. Results showed that there were statistically significant differences for the group who studied based on the flipped class strategy. The study recommended enhancing the experience of the flipped class for teachers by holding training courses for them.

Ralph (2016) in his study conveyed that flipped classes changed the role of students. Students were taught using traditional methods in class and did home works at home. Students now prepared at home and do activities and worksheets at school.

Most studies have agreed on the advantage of the flipped class on the students' achievement in the educational classes in all fields. The study in hand will shed more light on this strategy in addition to the way it is applied and its effect on the classes of the second language.

A. The Concept of the Flipped Class Strategy

Bergman and Sams (2012) define this strategy as attending the class after being prepared earlier at home through watching an educational video or doing other activities given by the teacher. Students afterward write down their notes and questions and then summarize what they have learned. Later, the teacher in the class helps students by answering their questions about the lesson or about concepts they have not made sense of. S/he also corrects wrong concepts they have about the topic. The rest of the class time is invested in doing different activities or projects.

They also defined it as being one of the active blended learning strategies in which teachers use modern technology in revealing the studying content throughout flipping learning missions between class and home in that, students read the content before they come to class and then interaction, practicing skills, doing activities and solving problems are done in classroom.

Brame (2013) defined this strategy as what students acquired throughout their exposure to new material outside classroom by reading or watching videos. Afterward, the teacher invests the time of the class in solving problems and discussions.

Johnson et al. (2014) pointed out that flipped class is one of the patterns of blended learning that connects between making use of technology in learning without neglecting the role of interaction between the teacher and the learner using technology and its tools to help efficient learning. The strategy of flipped class enriches the educational process and achieves positive learning outputs; first at the level of knowledge that represented in increasing the attainment, second at the level of skills represented in acquiring skills and third at the sentimental level which represented in loving the studying material and positive interaction with it in the classroom between the teacher and the learners, or amongst learners.

Azzabin (2015) evaluates it as an educational strategy centered on students instead of teachers. Students watch short educational videos at home, whereas teachers seize the time of the class in providing interactive learning environment in which students are encouraged to apply what they have learned.

From the definitions above, we notice that this strategy depends on doing missions at home or in any place that the student chooses, and then the teacher in the classroom does activities that have to do with what the students have done before the class.

B. The Main Pillars of Implementing the Strategy of Flipped Class

The council of the Flipped Learning Network (FLN, 2014) has set up four pillars in order to implement the strategy of flipped class; those are derived from the terminology itself:

- 1. Flexible Environment: means that flipped class provides flexible learning environment meaning that the teacher has flexibility in using various teaching and assessment methods
- 2. Learning Culture: adapts the idea of active learning that makes the students the center point of the learning process.
- 3. Intentional Content: includes the content that the teacher designs so to guarantee the success of the flipped class in helping students to discover the material themselves and develop their comprehension for concepts.
- 4. Professional Educators: those are of great importance in the flipped classes in that they continually monitor students, evaluation their work and giving them feedback. Here comes the importance of the educational institution that teachers belong to in training them and developing their professional skills.

C. The Advantages of the Flipped Class

According to Khalifa (2013) and Mazur et al (2015), using flipped class strategy has many advantages:

- 1. Students can lean fast in the place and time suitable to them.
- 2. Students can repeat the lesson more than one time and at any time so to get the information back, take notes or write questions about the content.
- 3. It helps in building up good relations and having interaction between students and teacher and amongst students themselves.
- 4. It provides more time to teachers to recognize students' abilities and help them out progress the learning process.
- 5. It helps in dealing with the individual differences amongst students no matter how many they are and investing the time of the class to deal with what they need.
- 6. It encourages applying other patterns of learning like groups, critical thinking, building up experiences, communication skills and cooperation amongst students.
- 7. Students in flipped classes achieve the lowest level of knowledge at home and the highest level of knowledge (application, analysis, synthesis and evaluation is being focused on at class (Brame, 2103).

D. The Difficulties of Using Flipped Class

There is no doubt that using any new strategy creates difficulties while applying it. Below are some of these difficulties of applying the strategy of flipped class according to (Mazur et al, 2015):

- 1. This strategy needs time and effort in order to prepare the educational content to students.
- 2. The teacher faces challenges in how to make educational videos. This might be attributed to not knowing how to use tools and programs needed to prepare such videos.
- 3. Lack of resources that help the teacher to record his educational content in the educational institution at which he words. This might force the teacher to go to other places that provides such resources, thus paying the costs at his own expense.
- 4. The teacher might prepare a specific educational content that neither suits his students nor its length is suitable. Therefore, the teacher is unable to reveal it to students.

E. The Stages of Applying Flipped Class in the Classes of the Second Language

Flipped class might be applied when teaching all language skills whether receptive (listening and reading) or productive (speaking and writing) in addition to grammar. However, before teaching the teacher has to set up a daily or weekly plan. Once the plan is set up, the teacher has to follow specific stages in order to apply it. These stages are the followings:

1. The Stage before Teaching

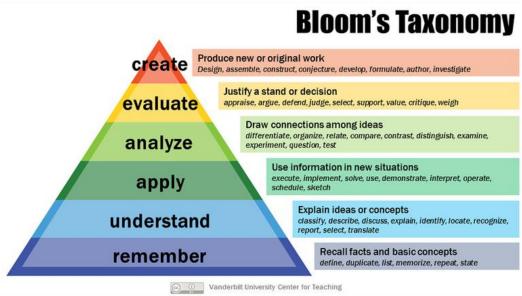
In this stage, students deal with the missions sent by the teacher like reading an article, watching an educational video via the laptop or the mobile phone (Strayer, 2007). Students also should take notes and questions during reading or watching the video. They can do this easily because they can stop the video once they would like to write down notes. They can also play it forward and back in order to comprehend specific points.

2. At the Beginning of the Lesson

Students come to class comprehending the main ideas related to the topic of the lesson. They ask their teacher the questions they have written down (Bergmann & Sams, 2012, p. 2). The teacher might start the class with summarizing the content, brainstorming or short question so to attract the students.

3. During the Lesson

The teacher gives students the activities s/he prepares earlier. It is preferable if the teacher prepares activities that are based on Bloom's taxonomy that he sat up in 1950. Activities should be exciting and meaningful achieving the ultimate goal. The activity might be practical that deals with solving problems that students might do in small groups or in group discussions.



https://sfia-online.org/pt/assets/sfia-8-consultation-graphics-documents/blooms-taxonomy.png/view

4. After the Lesson

The teacher might send some explanations and material if needed to students. It is better not to give them any extra activities after the class. This is in order to give them an opportunity to think about what they have done and learned.

Via the strategy of the flipped class the teacher can deal with the individual differences not withstanding their number. S/he can also provide students with feedback, raises their educational abilities in addition to creating fun and interaction in the class and keep up with the latest developments in the technology relating to education.

III. METHODOLOGY

A. Participants

The participants in this study are fifty students who studied in the general program in the language centre-Jordan University. The language centre was established in Jordan University by royal decree in 1979. It includes three departments; Arabic language department, English language department in addition to the department of Arabic for speakers of other languages. Each semester, the department of Arabic for speakers of other languages provides curriculums and other supportive language programs in order to teach Arabic for non-speakers of it.

The curriculum programs represented in the general program that includes more than eight levels to teach Arabic for non-speakers of it in more than one section for the same level. Students study a series of educational books that focus on the basic linguistic skills. In addition, language centre offers programs of special courses held based on special principals and within agreements held with academic institutions, embassies and international institutions.

There are also other supportive programs aimed to engage students in the campus and acquaint them with the Jordanian culture thus giving them the opportunity to practice the language and connects it with life and surroundings. Such programs represented in language partner, cultural, artificial, sport and language clubs in addition to picnics, visits and different activities.

The program of the Middlebury stats in the Middle East in Fall of (2011) in Jordan University in the Languages Center/department of Arabic Language for speakers of other languages. It consists of five language levels in addition to the Jordanian Colloquial. It also consists of content classes that deal with different fields like commerce, translation, politics, and press. The program in the Middle East is characterized by giving students a real opportunity to improve their language skills in Arabic language through the pledge that they sign and states not to speak English during their stay in Jordan in the dorm. They have also to interact with the native speakers of the language. By doing this, they are immersed in the Jordanian society.

This study is applied on the students of the first and second levels in Languages Centre in addition to the students of the second and third levels in Middlebury program held in Jordan University during a length of five semesters. They are all (120) student.

Each semester, students were divided into two groups (control and experimental). The students of the experimental group consisted of (60) student were given a test before they started to study based on the method of flipped class. Students of the control group consisted of (60) student studied based on the traditional methods. When the semester ended up, students were examined once again.

B. Study Hypotheses

The hypotheses of the study can be clarified as follows:

Null Hypothesis: There are no differences between the average of the tests held before and after the method of focusing on the form.

Alternative Hypothesis: There are differences between the average of the tests held before and after the method of focusing on the form.

C. Data Analysis

The current study aims at determining whether or not the use of flipped class strategy in classes of Arabic as a second language has advantages on students' learning. The collected data has been analyzed based on the (SPSS) program so to extract the different statistical procedures such as the descriptive statistics represented in arithmetic mean and standard deviation for the variables of the study. This is to describe and summarize the data.

IV. RESULTS AND DISCUSSION

In order to clarify the differences in performance before and after using the method of flipped class in classes of Arabic language as a second language, the study uses statistical and descriptive methods in addition to statistical analysis based on the Independent Samples Test.

A. The Descriptive Methods

Table (1) indicates the descriptive statistics for the data. It is noticed that the highest mark, represented by the variable (Before), achieved by the students before applying Flipped Class Strategy was (41) and the lowest mark was (18) whereas the highest mark, represented by the variable (After), after applying the method was (50) and the lowest mark was (27). In addition, the highest value for the Mean between the variables was for the variable (After) then came the variable (Before). The values were (40.600) and (30.367), respectively. The highest value for the standard deviation went for the variable (After) then came the variable (Before). The values were (5.3905) and (4.4947), respectively. It is worthy to mention that students achieved noticeable progress when the strategy of the flipped class was used.

TABLE 1
THE DESCRIPTIVE STATISTICS FOR THE DATA

Descriptive Statistics										
	N	Minimum	Maximum	Mean	Deviation .Std					
Before	60	18.00	41.00	30.3667	4.4947					
After	60	27.00	50.00	40.6000	5.3905					
(listwise)Valid N	60									

Resource: Done by the researchers using SPSS.

B. The Statistical Methods

The Independent Samples Test was carried out on the data collected from the students before and after using the strategy of flipped class. This is to see whether or not there are differences between the two tests and to assess whether or not using this strategy was successful. The table below clarifies the results of the tests.

not assumed

 $TABLE\ 2$ CLARIFY THE RESULTS OF THE INDEPENDENT SAMPLES TEST ON THE VARIABLE OF THE STUDY

Group Statistics												
	Typy_e	N	Mean		td. eviation	Std. Error	Mean					
Exam_marks	Before	60	30.366	7 4.	44312	.55110						
	after	60	40.566	7 5.	37095	.66618		1				
Independent Sa	Independent Sample Test											
Levene's Test f Equality of Variances				of	t-test for Equality	of Means						
			F		Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confider	nce Interval of the Difference
Exam_marks	Equal va assumed		5.64	47	.019	-11.079	118	.000	-10.2000	.92068	-12.02319	-8.37681
	Equal va	riances				-11.079	114.446	.000	-10.2000	.92068	-12.02378	-8.37622

Resource: Done by the researchers using SPSS.

The results of the Independent Samples Test show the followings:

- 1. The quality of the study sample was accepted. This is evident via the (T-test for Equality of Means) in the value of (F). It reaches (5.647). Therefore, it is intangible and less than 5%.
- 2. The result of the (T-test for Equality of Means) shows that the influence of using the strategy of flipped class on students is intangible and represented in T-test. In the assumption of (Equal variances assumed or not assumed) it reaches (-10.2000) and it is intangible in the value (sig.) as it reaches (0.000). It is also less than (0.5%). Accordingly, the null hypothesis is refused and the alternative hypothesis is accepted which assumes that there are differences between the average of the tests held before and after the strategy of flipped class.
- 3. The mean of differences between the variables in the (T-test for Equality of Means) with the assumption of (Equal variances assumed or not assumed) approximately equals (-10.2000).
- 4. The deviation of the differences mistakes in the (T-test for Equality of Means) with the assumption of (Equal variances assumed or not assumed) approximately equals (0.92068).

Based on results of the study, we notice that using the strategy of flipped class is effective when learning a language. The results meet with the study of Ali (2015) and Hasan (2015) which states that teaching based on the strategy of flipped class has positive influence on the students. Students got higher marks in the test held after teaching based on this strategy unlike when they were studying based on the traditional methods. This means that using the strategy of the flipped class enhances students' abilities to learn skills and comprehending the educational content of the Arabic language as a second language better. When comparing the means of marks via T-test, the difference was apparent. This meets with (Lage et al., 2000).

V. RECOMMENDATIONS

Below are some recommendations that might be carried out for future research:

- 1. Encouraging teachers of Arabic as a second language to use this strategy in their classes.
- 2. Providing technical support for teachers in institutions and universities that include classes of teaching Arabic as a second language.
- 3. Holding workshops so to exchange the educational experience amongst teachers who use flipped class strategy in their classes.
- 4. Holding training courses for teachers about how to use this strategy in their classes.
- 5. Conducting more future research on the perspectives of students as to using this strategy in their classes in addition to their opinions about the performance of students once this strategy is applied.

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