The Potential Effect of Using Flipped Classroom on Jordanian EFL Eighth Grade Students' Reading Comprehension

أثر استخدام الصف المقلوب في القراءة الاستيعابية لطلبة الصف الثامن الأردنيين دارسي اللغة الإنجليزية كلغة أجنبية

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and learning. Therefore, using a new technological strategy is significant. The flipped classroom strategy is one of these new strategies, which may positively affect students' achievement in reading comprehension.

Reading influences the achievement of students. It offers new vocabulary and positively affects language skills (Nasri & Biria, 2016). In addition, students become more self-confident when they can read texts in English both in the classroom and outside the classroom. Reading comprehension also helps students access information and cultures from different resources (Yee, 2010).

Reading is "a complex, multifaceted pursuit requiring the continuous deployment and integration of multiple operations . . . [A]dept reading is a constellation of interfaced capabilities, ranging from mechanical mappings to more sophisticated conceptual manipulations, such as reasoning and inferencing" (Koda, 2004, p. 227). When students read, they aim to comprehend the text. Hence, comprehension is the purpose of students' reading.

Reading comprehension depends on constructing meaning through active interaction between the reader and the text. This process is affected by past knowledge of the reader and his/her experiences (Harris & Hodges, 1995). Reading comprehension is an interactive process with written texts in order to create meanings (Paris & Stabl, 2005).

It can be said that reading comprehension is a hard process. Students are required to recognize first the printed codes and then the meaning behind these codes. The reading comprehension process may be affected by some factors such as the readability degree of the text, students' anxiety from reading, and their motivation as well as their attitudes towards reading (Dennis, 2008). These factors influence understanding the written texts.

The flipped classroom strategy is one of the recent trends that may have an influence on students' reading comprehension. It also relies on the files and videos that are prepared by the teacher. Hence, the students can watch and study the learning material in their houses and then come

الملخص:

هدفت الدراسة إلى بحث مدى تأثير استخدام الصف المقلوب على القراءة الاستيعابية لطلبة الصف الثامن الأردنيين دارسي اللغة الإنجليزية كلغة أجنبية. تكون أفراد الدراسة من 67 طالبا من طلاب الصف الثامن الأساسي في مدرسة حكومية في الرصيفة وهي الإدريسي، في العام الدراسي 2018/2018. وقد جرى توزيع الطلبة المشاركين على مجموعتين: مجموعة ضابطة و أخرى تجريبية. وقد جرى تدريس المجموعة الضابطة بالطريقة التقليدية؛ بينما تم تدريس المجموعة التجريبية باستخدام الصف المقلوب. ولجمع البيانات، وجرى استخدام اختبار الصف المقلوب. وقد أظهرت نتائج الدراسة فرقا دالا بين الاوساط الحسابية في القراءة الاستيعابية في الاختبار البعدي لصالح المجموعة التجريبية التي درست باستخدام الصف المقلوب.

الكلمات المفتاحية: طلاب اللغة الإنجليزية كلغة أجنبية، الأردن، الصف المقلوب، القراءة الاستيعابية، الصف الثامن.

Abstract:

This study investigated the effect of using the flipped classroom on Jordanian EFL eighth- grade students' reading comprehension in English. The participants were 67 male students from two sections of a public school, Al Idressi, Russaifa, Directorate of Education in the academic year 2018/2019. The participants were assigned to the control group taught conventionally, and the experimental group taught by the flipped classroom. To gather data, a pre-/post test was used. The results of the study showed that there was a significant difference between the mean scores of the study groups in the post-test favoring the experimental group due to the teaching strategy used.

Keywords: EFL students, Jordan, Flipped Classroom, Reading Comprehension, Eighth Grade.

Introduction

With the advance in technology, it is very hard to keep using traditional methods of teaching

flipped learning use is an additional burden on the teacher. It also requires new teaching skills that have never been used before. Moreover, students have never encountered such learning experiences, which may lead them to refuse it as it needs much work at home to be done and to prepare the lessons before classroom time (Al Khaleefa & Deyaa, 2015; Herreid & Schiller, 2013).

Many studies were conducted on the use of the flipped classroom as an effective learning tool to enhance language skills. For instance, Sağlam and Arslan (2018) examined the effect of the flipped classroom on students' achievement. However, few studies investigated the flipped classroom effect on reading comprehension. The present study, therefore, seeks to identify the effect of using the flipped classroom on developing eighthgrade students' reading comprehension in Jordan.

Statement of the Problem

Teaching reading comprehension problem for most EFL teachers. The researcher noticed that eighth-grade students faced difficulty in answering questions of reading comprehension easily. This problem and weakness may be due to several reasons. First, some teachers rely on traditional methods of teaching reading. Second, there is a lack of suitable technological techniques in teaching English, which can motivate students in their learning. Jordanian researchers (e.g., Amoush, 2012 and Jarrah, 2008) stated that students are at the lowest level in reading comprehension because of the unsuitable use of reading comprehension strategies. Therefore, using the flipped classroom in the teaching/ learning process may have a possible positive effect on students' reading comprehension. Specifically, many studies showed that the flipped classroom strategy has a positive effect on students' performance and recommend to use it.

Purpose of the Study

This study aims at investigating the flipped classroom effect on eighth-grade students' reading comprehension.

to the class to ask and answer questions related to what they have read (Bergman & Sama, 2012).

Moreover, the flipped classroom allows the students to watch and study the lessons out of the class time, and do activities and exercises in classtime (Educase, 2012)

It is claimed that the flipped classroom is one of the newest technological solutions for dealing with traditional learning disabilities and enhancing students skills (Al-Zahrani, 2015). In the flipped classroom, teachers can spend time interacting, talking, and discussing with their students more than the traditional classroom (Brame, 2013).

According to Tucker (2012), the first teachers who use the flipped classroom in their teaching are Tom Bergman and Aaron Sams in 2012. They offer their students some lessons to be studied as homework and use lesson time for various educational activities (Tucker, 2012). In this way, the lesson time is more available for cooperative activities. This shift in teaching allows the teacher to change his/her role from the monitor of the classroom activity to the facilitator (Hussain, Abusa'aleek & Elenzi, 2017).

There are several merits of the flipped classroom in the teaching/learning process. These include changing the teacher's role from the person who has the knowledge to the one who is a motivator and guide for students. In addition, it increases the students' involvement in the class. Using the flipped classroom also encourages students to be independent learners based on their abilities, interests, and learning styles. Another advantage of flipping learning is that it allows students to study and repeat the material at any time, anywhere, and several times. This means that classroom time is used in productive activities. Additionally, it provides a fun and enjoyable learning environment to keep students attentive and motivated. This develops the students' higher-order thinking skills, such as critical thinking skills (Strayer, 2012; Fulton, 2012).

In spite of the merits of the flipped classroom, some teachers indicate that flipped classroom has demerits too. Using the flipped classroom needs more time preparing the daily lesson plan. Hence,

measured by the eighth-grade students' scores on the reading comprehension test.

Eighth-grade students who have studied English for eight years.

Limitations of the Study

This study was restricted by the following two factors:

- 1. The study was restricted to the students of the eighth grade in public school, Al Idressi Secondary School for boys in Russaifa, Jordan, during the second semester of the academic year 2018/2019.
- **2.** The duration of the present study lasted only three weeks.

Review of Related Literature

Different studies investigated the effect of using the flipped classroom. In this regard, Enfield (2013) used the flipped classroom as an instructional approach on fifty university students in the USA. To collect the data, a survey was used. The results showed that the flipped classroom had a valuable educational tool for students.

Farah (2014) studied the effect of using the flipped teaching strategy on forty-seven twelfth-grade students' writing performance in the United Arab Emirates. The data collection was based on a pre/post-test. The results showed that there was a positive impact on students' performance after they studied using the flipped classroom.

Ahmad (2016) examined the flipped classroom effect on thirty-four university students' listening comprehension in Egypt. Collecting the data was administrated by a pre-/post-test. The results showed that the flipped classroom was effective in students' listening comprehension.

Abaeian and Samadi (2016) studied the flipped classroom effect on one hundred females learners' reading comprehension in Iran. The participants were divided into the flipped learning group and the traditional learning group. The findings revealed that flipped learning had influenced positively on female learners.

Al-Harbi and Alshumaimeri (2016)

Question of the Study

This study seeks to answer the following research question:

1. Are there any statistically significant differences ($\alpha = 0.05$) in eighth- grade students> reading comprehension attributed to the teaching strategy (flipped classroom vs. traditional)?

Significance of the Study

The present study may be significant since it investigates the flipped classroom strategy use on Jordanian EFL eighth- grade students' reading comprehension. There is no other research, to the best of this researcher's knowledge, conducted on the Jordanian EFL students that investigate the flipped classroom effect on students' reading comprehension. Besides, the results of this study can help teachers of English as a foreign language to use new teaching strategies in teaching reading comprehension. Further, the results may also provide the educational field with a new teaching strategy, and this may help the decision-makers in the education field generalize its use in Jordanian schools.

Operational Definition of Terms

Flipped classroom is a student-centered technological strategy. Students are allowed to explore materials at home by watching short videos and a PowerPoint on target subjects before they reach the classroom (Bishop & Verleger, 2013).

In this study, the flipped classroom is the process of giving students the material on CD to explore the material at their house, and back to the class answering and asking questions about what they have learned in reading comprehension lessons.

Reading comprehension is a process of comprehending the text through interaction between the reader and the text (Ahmadi & Hairul, 2012).

In this study, reading comprehension is the ability of eighth-grade students to comprehend the texts at the literal and inferential levels. It is students who were taught traditionally.

Concluded Remarks

The previous studies can be summarized as the following: First, all the studies showed in their results that using the flipped classroom had a positive effect on students' performance. Second, studies examined the flipped classroom effect in different courses, such as science (e.g., Elian & Hamaidi, 2018), reading comprehension (Hashemifardnia et al., 2018; Abaeian and Samadi, 2016), listening comprehension (e.g., Ahmad, 2016), grammar (e.g., Al-Harbi and Alshumaimeri, 2016), writing (Farah, 2014). Third, all the studies differed in their samples such as the fifth grade (e.g., Hussain, at al., 2017) and fourth grade in (Elian & Hamaidi, 2018), third grade in (Hashemifardnia et al., 2018), secondary students in (Al-Harbi and Alshumaimeri, 2016). Fourth, some studies chose university students as a sample of the study such as (Enfield, 2013; Abaeian and Samadi, 2016; Hsieh et al., 2017). Fifth, all the past studies used the pre-post-test as an instrument of the study, except only one study (Enfield, 2013) that used a survey.

This study investigated the flipped classroom effect on eighth-grade students' reading comprehension. There is no study-to the researcher best knowledge-that investigates the effect of the flipped classroom use on students' reading comprehension at the basic educational stage in Jordan. Also, the present study differs in its participants with 67 eighth-grade students.

Method and Procedures

Design and Variables of the Study

The present study adopted the quasiexperimental design, which depends on one experimental and one control group. The flipped classroom was considered as the independent variable, whereas the eighth-grade students' scores on the reading comprehension test were the dependent variable.

Participants of the Study

Sixty-seven eighth grade students were conveniently selected as participants in the academic year 2018/2019. Through putting the

examined the effect of flipped classrooms on forty-three secondary school students' grammar performance in Saudi Arabia. Two groups were used as experimental (flipped learning) and control groups (traditional learning). A pre-/post-test was administered to identify the potential effect of the flipped classroom. The study results showed that the flipped classroom was viable in improving students' grammar performance, indicating that flipped learning was beneficial in learning.

Hussain, Abusa'aleek, and Elenzi (2017) examined the possible effect of the flipped classroom use on fifty-five Jordanian grade students' English achievement. Data was gathered by a pre-/post test. The results of the study indicated that there was a difference between the mean scores in favor of the experimental group taught by the flipped classroom.

Hsieh, Wu, and Marek (2017) examined the effect of using the flipped classroom on forty-eight university students' speaking in Taiwan. To collect the data, the pre-/post-test was used. The results showed that flipped classroom was effective in teaching idioms, indicating that flipped learning was viable to achieve the teaching goals.

Elian and Hamaidi (2018) investigated the effect of using the flipped classroom on Jordanian forty-four fourth-grade students' achievement in science. A test was used and applied to the study sample. The results revealed that students who taught by flipped learning were performing better than those who had traditionally practiced.

Hashemifardnia, Namaziandost, and Shafiee (2018) studied the potential effect of the flipped classroom on the fifty-third-grade students' reading comprehension in Iran. A pre-/post-test was administered as an instrument of the study. The findings revealed that students who were taught by the flipped learning had the best performance in the reading comprehension test, which meant that flipped learning was successful in reading instruction

Bezzazi (2019) examined the effect of using flipped learning on seventy-nine students' speaking in Taiwan. To collect the data, a pre-/post-test was used. The results indicated that students who taught by the flipped classroom outperformed the

Reading Comprehension Skills	No. of Questions	Percentage	
5	10	100%	

The validity of the reading test was to match the test content with Action Pack 8 textbook. Thus, the test was given first to a jury of experts. They were asked to review the test, and finally, their comments were taken into account in order to prepare the final copy of the test.

The reliability of the test was obtained by conducting the test on a group of students, as a pilot study, who were from another school and were excluded out from the sample of the study. After two weeks, the test was re-tested again with the same students. The reliability coefficient of the test was 0.80, which means that the reliability is achieved.

The Material of the Study

To achieve the purpose of the study, the researcher chose unit 5 from the Action Pack 8 textbook, titled You can do it! Thus, the objectives were prepared and stated, and the material was adapted to be suitable for the flipped classroom use.

Two texts in the targeted unit were prepared to teach them by the flipped classroom strategy. Students were also given an opportunity to read, listen, and explore the educational material at their homes and out of class time. When the students come back to the classroom, several activities were prepared by the teacher, such as group works, worksheets, and brainstorming.

Different activities were adopted to facilitate teaching the unit based on the flipped classroom. These learning activities included videos from YouTube website and PowerPoint slides to present the learning material in an interesting and stimulating learning environment. In addition, pictures, written texts, and worksheets were used to improve the learning experience.

The validity of the learning material was established by giving it to experts in different Jordanian universities and some expert teachers names of the sections in a basket, the participants were assigned into the experimental and control group. The first one was taught using the flipped classroom, and the later one was taught traditionally. The distribution of the two study groups is shown in Table 1.

Table 1:

The distribution of the study groups according to the study variable.

Variable	Teaching Strategy			
Variable	Flipped Classroom	Traditional		
Number	35	32		
Percentage	52%	48%		

The Instrument of the Study

The Reading Comprehension Test

The reading comprehension test was applied on 67 eighth-grade students in both groups under study. However, the experimental group was tested twice, before and after the training for the three weeks occurred. The reading test was correlated with eighth-grade learning outcomes suggested by Action Pack 8. The English textbook for grade 8 used to analyze its content in terms of reading comprehension skills.

This test consisted of multiple-choice items, totaling ten items. This test aimed to measure students' prior knowledge before the flipped classroom strategy was being used. Table 2 presents the questions that belong to each reading comprehension skill.

Table 2:Specifications of the Test

Reading Comprehension Skills	No. of Questions	Percentage
Guessing meaning from the text	2	20%
Skimming the text for the main idea.	1	10%
Scanning the text for specific information.	4	40%
Finding referential pronoun	1	10%
Making predictions	2	20%

T-test values used to identify the differences in the pre-test mean scores between the experimental group and the control group.

Table 3:
The participants' scores on the pre-test according to the strategy applied

Strategy	N	Mean	Std. Dev	T	df	Sig.
Flipped Classroom	35	8.91	4.154	1.854	65	*.068
Traditional	32	7.13	3.705			
Total	67	8.06	4.018			

^{*}Not significant at the significance level ($\alpha \le 0.05$)

Table 3 shows that there was no statistical significance at the level $\alpha \le .05$, which is attributed to the teaching strategy. T. Value was 1.854 with a significance level of 0.068. This means that the study groups are equivalent.

Findings Related to the Research Question

The research question: Are there any statistically significant differences ($\alpha=0.05$) in eighth-grade students' reading comprehension attributed to the teaching strategy (flipped classroom vs. traditional)? The means and std. deviation, T-test values were calculated for the participants in the post-test. Table 4 presents the results of the research question.

Table 4:
The participants' scores on the post-test due to the teaching strategy

Strategy	N	Mean	Std. Dev	Т	df	Sig.
Flipped Classroom	35	11.86	3.766	3.924	65	.000
Traditional	32	8.16	3.952			
Total	67	10.09	4.256			

The results in Table 4 show that there were statistically significant differences between the participants' mean scores on the post-test favoring the experimental group taught by the flipped classroom that can be attributed to the teaching strategy. The mean score of the experimental group was 11.86, whereas the control group was 8.16.

from the Jordanian Ministry of Education. The learning material was revised based on their comments and reflected on the final format of the learning material. The learning material was piloted on a sample of 20 eighth-grade students who were chosen from outside of the study. They reported that the learning material was not difficult, and it was exciting. This means that the learning material was suitable for the study purpose.

Procedures of the Study

- 1. The learning content was prepared based on the flipped classroom, including the activities, exercises, and worksheets.
- 2. The two study groups were conveniently selected, and the reading pre-test was administrated to check the equivalence of the two study groups.
- 3. The students in the experimental group were provided with the experimental learning content, equipped with a CD containing the learning activities, exercises, selftest questions to enable them to watch the learning material at home. By contrast, the control group was taught using the traditional method.
- **4.** The study groups were taught by the same teacher.
- 5. The experimental group studied reading comprehension by using different activities and exercises for three weeks.
- 6. The post-test was administrated. Results were collected and entered into the statistical package software (SPSS) to elicit results.

Results of the Study

Results Related to the Equivalence of the Two Study Groups

The equivalence between the study groups was tested before the treatment was used. A pretest for students of both groups was administrated. Table 3 shows the means, standard deviations,

The findings of the present study demonstrate the positive effect of the flipped classroom strategy on eighth-grade students' reading comprehension. The finding of this study is consistent with other studies (e.g., Elian & Hamaidi, 2018; Hashemifardnia et al., 2018; Hussain, at al., 2017; Abaeian & Samadi, 2016; Ahmad, 2016; Al-Harbi & Alshumaimeri, 2016; Farah, 2014).

Recommendations

Based on the study results, the following recommendations are put forth as follows:

- Teachers are encouraged to use the flipped classroom strategy in their teaching reading comprehension, which helps them to make EFL teaching and learning more active.
- 2. The Ministry of Education is asked to train EFL teachers on the use of the flipped classroom strategy and encourages them to use this new strategy since it may positively affect students' performance.
- 3. Future research investigating the effect of using the flipped classroom on other skills such as speaking skills is required.

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These results ensured that the use of the flipped classroom has a positive effect on Jordanian EFL eighth-grade students' reading comprehension in English.

Discussion of the Results

The study question examined the effect of using the flipped classroom on Jordanian EFL eighth-grade students' reading comprehension. The results showed that there was a significant difference between the students' results in favor of the experimental group taught by the flipped classroom.

One possible explanation is that the use of the flipped classroom is based on student-centered learning since it uses educational videos that can be seen at home by students before they come to class, which allows the teacher to cooperate with students and to solve specific problems during the class time. This new strategy allows the students to learn new concepts of self-study at their home by watching a short video, which provides them enough time to repeat the educational content several times. This way of teaching encourages eighth-grade students to pursue their learning in an enjoyable environment.

Another possible explanation of the performance of the experimental group is that using the flipped classroom facilitates students' learning by putting them on the right path to solve tasks, as well as asking and answering questions. This teaching strategy allows the teacher to take into account students' individual differences and their learning styles. Additionally, the eighth-grade students can study and review the educational material at any time based on their pace far away from the classroom embarrassment environment.

This result may be due to the fact that the students who taught by the flipped classroom found themselves more enthusiastic in their learning reading comprehension. Also, this result may be due to the fact that the participants learn in a non-traditional method that allows them to communicate and discuss with the teacher comfortably. Moreover, using different activities and exercises is a key factor in making students active and motivated in their learning.

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